DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1952

TUESDAY, AUGUST 7, 1951

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room 224, Senate Office Building, Hon. Joseph C. O'Mahoney (chairman of the subcommittee) presiding.

Present: Senators O'Mahoney, Chavez, and Ferguson.

DEPARTMENT OF THE ARMY

ORDNANCE SERVICE AND SUPPLIES

STATEMENTS OF MAJ. GEN. E. L. FORD, CHIEF OF ORDNANCE; MAJ. GEN. J. KIRK, ASSISTANT CHIEF OF ORDNANCE; BRIG. GEN. E. L. CUMMINGS, INDUSTRIAL DIVISION, CHIEF OF ORDNANCE; MAJ. GEN. G. H. DECKER, CHIEF, BUDGET DIVISION, OCA; MAJ. GEN. WILLIAM O. REEDER, DEPUTY ASSISTANT CHIEF OF STAFF, G-4; COL. JOHN E. PERMAN, MANPOWER CONTROL DIVISION, ASSISTANT CHIEF OF STAFF, G-1; W. W. STOREY, ORDNANCE COMPTROLLER, CHIEF OF ORDNANCE; AND LT. COL. R. E. PETERS, EXECUTIVE OFFICER, PERSONNEL AND TRAINING DIVISION, CHIEF OF ORDNANCE

PRESERVATION OF AMMUNITION

Senator O'MAHONEY. We will come to order, gentlemen.

We have next the project of preservation of ammunition.

Of course, we have before us the justification and we have the preliminary statement of General Ford.

I do not think it is necessary, under the circumstances, particularly now that the House committee has acted and the House itself will act speedily, to go into minor details.

PROGRAM OF FURTHER HEARINGS

It is my feeling—and I think Senator Ferguson shares it—that unless, as we go through this here, there are matters of real importance that we ought to discuss from our own examination of the budget, it is much more important we go through speedily and proceed to the further hearing to which I referred throughout these meet-

ings, namely, of the General Staff, the Joint Chiefs of Staff, the Secretary of Defense, with respect to the end objectives.

Of course, I have said this before, but I will repeat, that it is clear that each group which appears here to give evidence is supporting an objective that has already been outlined. You are carrying out your directives.

The issue in this bill, as I see it, is whether or not the objectives are too large or too small. I think we made a little progress yesterday in the discussion of the specifications for the weapons, as to whether or not those specifications are too detailed and too expensive.

But when all is said and done, the amount of money which is to be expended in this preparedness program all depends upon the objectives laid down by the Joint Chiefs of Staff and the decision among the three services of the part each one is to play.

We have had testimony before the committee by Senator Lodge, of Massachusetts, advocating a much larger United States Air Force.

Some of us on this committee throughout our service on the committee have urged a larger Air Force than we ever had. But, at the same time, whatever we spend depends upon the capacity of the American economy to do the job.

So I feel, for that reason, that we can probably go through these items very speedily and thereby hasten the presentation by the higher authority.

Do you have anything to say on that, Senator Ferguson?

Senator FERGUSON. I share that view.

Particularly after our conversation yesterday morning. I think it boils down to this: What do we want to do in America? How much preparedness can we have?

It may be that by a conversation and working with the Joint Chiefs and various others who determine the policy, we can come up with the answers.

You see, as we indicated yesterday, there is a function of the Army that needs so many tanks, so many machine guns, so many other items. We are rather helpless—I will put it that way—to determine the nature of the tank, whether the tank is going to cost one sum or another sum.

The question is: How many light tanks do you need; how many heavy tanks? And somebody else must determine how much those tanks are going to cost.

We talked yesterday about the frills on the tanks. Is it necessary to change them ever so often? We can get some expert advice, but I think the chairman is right this morning when he says we have to really go to the top, to the determiners of the policy.

Senator O'MAHONEY. It is only necessary here to have the total appropriation for ordnance, which is something over $8 billion.

BURDEN OF ARMAMENT EXPENSES

Senator FERGUSON. Yes, sir; compared to $60 billion.

Senator O'MAHONEY. We have grown so accustomed to talking in billions that we just do not realize what the sum is.

But the gravity of it, from my point of view has been the reluctance of Congress to levy the taxes which are necessary to continue a pay-as-we-go program.

The House sent over a bill which is estimated to raise about $7,500,000,000. That is less than the budget for ordnance alone.

There is talk, although we have no authority for it as yet, that the Senate Finance Committee may reduce that. There is talk of levying a sales tax upon the consuming public.

Of course, a sales-tax increases the burden upon those who can least afford it by increasing the cost of living.

Senator FERGUSON. You really have a sales tax now when you have this large corporation tax. They add it to the cost of the product. It is in effect the same.

Senator O'MAHONEY. Yes, they pass it on.

So I think, General Kirk, as you discuss this problem of ammunition this morning, will you just hit whatever high spots you think have not been touched as yet?

Of course, with respect to ammunition, we have to take your word for it. That is the fact of the matter.

And I must say that, having sat here throughout this hearing, I feel that all of the representatives of the Army and the Navy and the Air Force who have appeared are to be complimented for the readiness to cooperate with the committee, to answer every question, to make a full disclosure of the facts.

Above all, I want to compliment you on the ability and the capacity that all of the officers who have come here have displayed. I think it is most encouraging to know that our military fate lies in the hands of men of such obviously high character and ability.

General Kirk, you may proceed.

PRESERVATION OF AMMUNITION

General KIRK. Project 420, preservation of ammunition, has no significant features that were not covered in the presentation covered by General Ford. The project covers the surveillance of ammunition, requiring the sum of $7,279,000; normal maintenance of ammunition, for which the requested sum is $21,600,000; and renovation of ammunition at a cost of $53,541,000.

PERSONNEL

Senator O'MAHONEY. General Kirk, I think a fundamental question relates to the personnel. We had some discussion about that yesterday and it was indicated that in view of the fact that the House had made a cut, you would want to make an over-all presentation with respect to personnel in the Bureau of Ordnance.

Are you prepared to do that now, or would you prefer to do it later?

RESULTS OF WAGE BOARD SURVEYS

General FORD. We will have to study the whole matter, Mr. Chairman, and we will have to come up a little later after we see just how it affects our operations.

Senator O'MAHONEY. I thought that would be your answer.

General FORD. We will have to say that we need to operate our depots and shops that are scattered all over the United States, where we are doing this maintenance work, in order to support the Army.

Senator O'MAHONEY. Then let me ask of General Kirk with respect

to the figures on page 1245 of the justification: How are the salaries, the compensation of the general employees of the Ordnance Corps fixed?

General KIRK. In regard to the unclassified employees, they are fixed by wage boards for the locality in which the work is done. Those wage boards' findings are reviewed and wages set as a result of those surveys.

Senator O'MAHONEY. Are they in line with the prevailing wage scale in the communities in which the depots exist?

General KIRK. That is the objective of the wage survey, and they are in line as far as the wage surveys can determine.

Colonel PERMAN. May I add something at that point, Mr. Chairman?

Senator O'MAHONEY. Yes.

Colonel PERMAN. We find that, as a result of these wage boards' surveys, that they lag behind the prevailing rate in industry. The result has been that in many areas, particularly in the field of the skills that ordnance needs, we have found difficulty in procuring personnel.

There is another factor which also enters into this particular field that is quite important. The various contractors employed by the Ordnance to accomplish this work will work their people on a 50- or a 52-hour week, so that the individual gets more take-home pay than if he works for the Army on a 40-hour week, which we require, except for specific overtime.

That also has contributed in many areas to a lack of build-up of personnel to meet our work force.

During the month of June, the Ordnance was able to do a great deal of recruiting through people coming out of training schools. The result has been that they have met their work force as originally contemplated within approximately 300 of the positions which we have authorized them.

SALARIES PAID CIVILIAN EMPLOYEES

Senator O'MAHONEY. The allegation is frequently made in letters received by Members of Congress and others that excessive compensation was paid by the Army or the Defense forces generally, particularly for clerical and stenographic help; that more people are employed than are absolutely necessary to do the work.

In one instance, which General Ford will remember, I received a letter from a lady in a community in which an ordnance depot was located, who said that the rates of pay were so high in the depot that ordinary businesses could not obtain help because of the competition.

Do you want to say anything on the record about that, sir?

Colonel PERMAN. I will, sir.

The clerical help which you refer to are governed by the general schedules put out by the Civil Service Commission. That constitutes what are commonly known as the white-collar workers. The Army does not set the wage scale, nor do they set the qualifications for that position. Those positions are all reviewed by local civil service agencies.

When the position is set up the Army must establish it in accordance with the directives of the Civil Service Commission, and then those positions are reviewed by them.

Senator O'MAHONEY. The responsibility, then, lies, in the last analysis, with the Congress, which fixes the pay scales and which provides the basic law under which the Civil Service Commission operates.

Colonel PERMAN. That is correct, sir.

As an example, this budget contains no funds for the recent increase for Federal employees authorized by the Congress.

NUMBER OF EMPLOYEES

Senator O'MAHONEY. That deals with rates and the rules under which the employment takes place. What about the number? Do you have more people than are required to do the work?

Colonel PERMAN. We have what we believe is a fairly comprehensive management system, which guards against the excess utilization of personnel. It is operated by the Army commands. It is decentralized from Washington to the Army commander, who is required to inspect every installation thoroughly on a formal management survey at least once a year.

The Department of the Army Manpower Branch participates actively in these surveys whenever possible in order to insure that the policies for consumption of personnel and good management utilization are being enforced in the commands.

Senator O'MAHONEY. The chairman of this committee received last week a letter from Assistant Secretary Anna Rosenberg defining certain new directives that had been issued. Have those directives as yet resulted in any scaling down of employment?

Colonel PERMAN. Do you refer particularly to the one on the 5-percent reduction, sir?

Senator O'MAHONEY. Yes.

Colonel PERMAN. The Department of the Army has issued comparable directives to all agencies involved as to the method of implementation of Mrs. Rosenberg's directive. It is too soon at this time to determine whether there has been any material reduction in the numbers of personnel employed.

In general, it amounts to the fact that you cannot replace an individual who resigns or elects to transfer to some other branch of Government, and I would say that there has been some reduction in our strength.

By the same token, I am afraid we are going to find that there is going to be a lot of overtime, because our workload in the Department headquarters has increased tremendously and we did not have the personnel necessary to meet that workload initially.

We are going to have to find ways and means to accomplish new missions which have been assigned to us, which will automatically be held in abeyance by that particular directive.

PERSONNEL FOR INFORMATION WORK

Senator O'MAHONEY. One more question: Has the Ordnance Corps employed any people for the preparation of information circulars for the public? I am not referring now to the circulars which you must prepare for your own personnel, for your workers, and the like. I am talking now about public information—publicity.

General FORD. I have in my office, Mr. Chairman, two civilian employees who operate in the capacity of providing public information. Much of their duty is to receive articles written by civilians for magazines, magazine writers, and technical articles written by officers of Ordnance. These articles are cleared in my office from the standpoint of security and accuracy, and forwarded to the security clearance agencies in a higher office in order that they may be cleared for publication. In addition, they take care of a steady flow of queries from all types of publications, radio, and television.

Senator O'MAHONEY. Is this in response to a demand from the public for information?

General FORD. Yes, sir; in the case of articles for open publication which may cover some of our equipment or some of our operations in our arsenals.

They may be prepared by a writer of, say, the American Machinist, or some such magazine, or even one of the more popular magazines. These articles come into my office for Ordnance clearance and then clearance by a higher agency.

Senator O'MAHONEY. Is that the extent of that employment, sir?

WAGE SCALES

General FORD. Yes, sir; as far as full-time civilian employment is concerned. However, I have three officers assigned to assist me in guiding the public-relations activities of the many Ordnance field installations, to work with the Office of Legislative Liaison of the General Staff, and with the Public Information Division, Department of the Army.

Mr. Chairman, could I present something in this matter of wage scales as it pertains to our organization, and particularly our manufacturing-type establishments, such as the Detroit Arsenal?

Senator O'MAHONEY. Yes, indeed.

General FORD. Not long ago we asked three outstanding industrialists to come into our Detroit Arsenal and survey the establishment and make recommendations to us as to what they thought might be done to improve the over-all operation. It developed, as a result of the discussion that we had with these three gentlemen, that they would consider that a scale of pay for the top officials in the arsenal would be as follows—and these scales are comparable to the scales in the Detroit area—that the general works manager would be a $25,000 man; the factory manager, $18,000; the general superintendent of the machine shop, $12,000; the general superintendent of the assembly shop, $12,000; the general superintendent of planning, $15,000; and the master mechanic, $20,000.

Of course, those rates of pay are much higher than anything that we have in civil service. I believe the highest-paid man that we have at the arsenal receives approximately $10,000.

So the rates of pay for our supervisory personnel in these very important positions of operating a manufacturing establishment are considerably less than comparable positions in industry.

Senator O'MAHONEY. These rates of pay that you now mention are less, are they?

General FORD. These were the rates that these gentlemen considered would be appropriate in an industrial establishment similar to our Detroit Arsenal.

Senator O'MAHONEY. So that the compensation that is actually paid to men occupying these positions is less than the standard of industry?

General FORD. Very much less, sir.

Senator O'MAHONEY. I think that is very interesting.

Senator CHAVEZ. You say that the high pay in civil service is around $10,000?

General FORD. Yes, sir. There are new grades that have been established on a very limited scale which are known as GS–16, –17, and –18. We are now working to get a GS–16 grade in our Detroit Arsenal, for which the rate of pay is approximately $11,000.

Colonel PERMAN. $11,200.

General FORD. That then will be the highest-paid civil-service employee at the Detroit Arsenal.

Senator CHAVEZ. Referring to your crafts, such as the machinist and the boilermaker and welder, is he a classified civil-service employee?

General FORD. No, sir; he is not. He is a wage-board employee.

There, as General Kirk mentioned, we have a procedure whereby the people working in our arsenals essentially receive the same wage prevailing in the community.

Colonel Perman brought out that these wage surveys quite frequently lag in keeping up with the changes in wage scales in the communities.

Senator CHAVEZ. In other words, in Ford and General Motors and the rest of the industrial establishments, they pay so much and you try to keep up with that, that is, the Board tries to keep up with that; is that correct?

General FORD. Yes, sir. That is the idea, to have our wage at Government manufacturing establishments in accordance with the prevailing wage in the community.

Senator CHAVEZ. Is there very much difference in wages between the west coast and, say, Detroit, or Baltimore?

General FORD. I would say in general, Senator, that Detroit is a high wage area.

Senator CHAVEZ. What about the South?

General FORD. The South by and large would be a lower wage area.

RECEIPT, STORAGE, AND ISSUE OF SUPPLIES

Senator O'MAHONEY. General Ford, with respect to project No. 430, the first item of which is for the receipt, storage and issue of your commodities, for which the estimate is $99,454,800, I would like to ask whether the same standards which you have just described with respect to these wages, or the same comparisons of standards, have been made with industry?

General FORD. No, sir. We have not made a comparison similar to the one that I gave you with respect to the Detroit Arsenal on the rate of pay of supervisory-type personnel.

Senator O'MAHONEY. I meant the whole thing. For example, these funds are asked for in order to enable you to operate the 33 storage

depots, 13 plants and works, and for other personal services at 5 Ordnance Corps Supply Sections of Quartermaster General Depots.

So here is a big overhead. Does this compare with the cost of similar services in industry?

General FORD. As to the cost of our operation, Mr. Chairman, I think that it will compare very favorably with what is done in industry in any similar type operation.

COMPARISON WITH COSTS IN PRIVATE INDUSTRY

Senator O'MAHONEY. Was any survey made to determine it?

General FORD. There was a survey made—and I will ask General Kirk to cover it—of our Rossford depot at Toledo.

General KIRK. The Rossford depot, handling automotive spare parts, is one of the largest storage points for automotive spare parts in the world. It receives a very large flow of requisitions and controls a large flow of shipments.

The employees are employed in an industrial area which is immediately adjacent to Toledo.

A manpower survey made of the wages being paid and the efficiency of the employees at the Rossford depot was informally compared with a local manufacturer. The findings were not made public because it was permissive investigation rather than authoritative.

It was found that the Rossford employees were much more efficient than the employees in the industrial concern. Fewer were employed for the same type of work, and the ones that did do the work worked industriously over the entire day while those in the industry plant only gave part-time service for the hours consumed.

The report was extremely flattering and reassuring and I called it to General Ford's attention as an indication that although such a survey had not been specifically authorized, it indicated that we were getting maximum efficiency at low cost out of the employees at Rossford.

Senator O'MAHONEY. When was this done?

General KIRK. This was approximately 18 months ago.

Senator O'MAHONEY. By whom was the survey?

General KIRK. It was done by the Comptroller of the Army Manpower Branch and representatives of the Comptroller's Office.

OVERHEAD, OFFICE OF CHIEF OF ORDNANCE

Senator O'MAHONEY. Let us turn to page 12–56, which is the overhead for the Office of the Chief of Ordnance.

The total there is $3,173,300. How does that compare with fiscal 1951? I do not seem to see that on this page.

Mr. STOREY. That compares, sir, with $512,090 for the fiscal year 1951.

I would like to tell you something about the reason for the increase.

Senator O'MAHONEY. Yes. That is a sixfold increase, so I think it would be well to put that in.

Mr. STOREY. Yes, sir.

The Ordnance activities have increased tremendously during the last fiscal year and will continue to increase during the fiscal year 1952.

The establishment of a field office at the Aberdeen Proving Ground for Safety and Intelligence will account for $70,000 this year.

There is a safety suboffice at the field level which has to be established also, which was funded for $106,000 in 1951, and it will require $281,000 during this fiscal year.

Another program is the industrial safety program directed toward posters and many other things which are required in industrial activities to warn personnel of dangers inherent in the job they are doing—a program similar to the one that industry has and which takes the same posters and publications which they use.

Last year that item was $40,000 and in 1952 it will require $52,000.

MISCELLANEOUS SUPPLIES

I would like to skip to the big item in the amount of $1 million, which now appears in this project for miscellaneous supplies, which we procure from the Office of the Quartermaster General, and which are shipped to the field. In prior years reimbursement was made to the Quartermaster General for such supplies, by charges from each of the several projects; to simplify procedures it is now presented in one amount in this project.

So even though it appears as an increase here, actually it is not. It is comparable to $800,000 expended for this purpose in fiscal year 1951.

Senator O'MAHONEY. Is it contemplated that Ordnance will receive the money and transfer it to the Quartermaster General?

Mr. STOREY. Yes, sir; we buy the supplies through their depots; that is, brooms, mops, and many other items that the Quartermaster General supplies through their depot system.

Senator O'MAHONEY. How do you fix the prices?

Mr. STOREY. The Quartermaster General, sir, fixes the price, which is their standard list price.

TRAVEL

As to travel for the Office of Chief of Ordnance, last year, 1951, we expended $300,000 and in 1952 we estimate that it will be $417,000.

Senator O'MAHONEY. What is included in that "Travel" item?

Mr. STOREY. That is travel, sir, of both military and civilian personnel of the Office, Chief of Ordnance, in visiting the Ordnance depots, manufacturing arsenals, the Ordnance procurement centers, and camps, posts, and stations of the Army and the Ordnance Procurement districts.

Senator O'MAHONEY. It is necessary, of course, that you keep in touch with all of these areas.

Mr. STOREY. It is very necessary, sir. It contemplates, really, our people getting to the field to see what goes on. They are better informed, better able to make decisions. At the field level, it is a very fine thing to have people come out from the headquarters to let them know that the Chief of Ordnance is interested in the activity and to see what goes on.

General FORD. I might add to that, Mr. Chairman, if I may. In our operation we must operate on a decentralized basis, with a few

people in Washintgon exercising the necessary control, supervision, and coordination of a very large operation.

That means that under such a system of decentralization we must have more travel of our people from Washington in visiting our decentralized agencies in the field.

FIELD CONTRACT PRINTING

Mr. STOREY. The next very large item is the field contract printing, which for the fiscal year 1951 was $75,000 and which for the fiscal year 1952 will be $1,250,000. That is required for the procurement of manifold forms and interleaf carbon forms and many other commercial-type forms which are more easily and more economically procured at the field level than through the Government Printing Office.

This procurement of the field contract printing is, in accordance with the specific approval of the Joint Committee on Printing and Binding of the Congress.

The reason for this again is the increase in Ordnance activities, which requires an increase in quantity of the many forms that we must have to do our business.

I think that accounts for the difference, sir, for the main items between $500,000 and the $3 million for this fiscal year.

Senator O'MAHONEY. Very well, sir.

Senator CHAVEZ. May I ask him a question, Senator?

Senator O'MAHONEY. Please do.

SPECIAL SUPPLIES, FIELD INSTALLATIONS

Senator CHAVEZ. This item of "Special supplies, field installations," is a small item, but what do you mean by it?

Mr. STOREY. They are special supplies, such as documents and other items procured through Washington for field stations; primarily procured from the Government Printing Office.

TRANSPORTATION, CHIEF OF ORDNANCE

Senator CHAVEZ. What about the "transportation, Chief of Ordnance"?

Mr. STOREY. That is the transportation of items to the field level of these supplies that we have procured in bulk.

Senator CHAVEZ. Over here in headquarters?

Mr. STOREY. Yes, sir.

PREPARATION OF MANUSCRIPTS

Senator O'MAHONEY. General Kirk, would you amplify a little on this item "Preparation of ordnance and technical manuscripts," appearing on pages 1258 and 1259? The estimate for that is $1,759,500. What is the purpose of these manuscripts?

General KIRK. The Ordnance Corps, as a technical service, has the responsibility to furnish the basic technical information dealing with the multitudinous and complicated mechanisms of war issued by Ordnance to the Army. The preparation of the manuscripts dealing with these items of matériel, that is, the preparation and editing, is done largely at the Raritan Arsenal.

Senator O'MAHONEY. That, I take it, is designed to enable the personnel who are charged with the care and use of the weapons, tanks, and vehicles—of which we had a lot of exhibits yesterday, to carry out their work.

General KIRK. Yes. It gives the basic information dealing with the construction features, with the instruction for the maintenance and operation of the equipment that is issued to the troops, and it is used as the basis for training manuals prepared for them for the instruction of field forces and other users.

Senator O'MAHONEY. Therefore, the more men you have the more training manuals and technical articles you must have.

General KIRK. The larger distribution we must have. Also, the larger number of items we manufacture, the more we have to publish. There are some 5,000 different ordnance technical publications, I believe, covering items of ordnance issue.

We also issue catalogs giving the nomenclature of the various items of issue so that they can be properly requisitioned.

Senator O'MAHONEY. Do the procurement districts, which are carried on page 1260, operate on an autonomous basis of any kind?

General CUMMINGS. No, sir. They have certain responsibilities for procurement, negotiation, execution, administration of all contracts within a certain geographical area, sir. They operate under direct control of the Office, Chief of Ordnance.

Senator O'MAHONEY. That, is operation.

General CUMMINGS. Yes, sir.

Senator O'MAHONEY. They have no authority to grant contracts, or do they?

CONTRACT PLACEMENT BY DISTRICTS

General CUMMINGS. They have authority to place contracts to procure materials for which they have been given orders to procure. We have delegated to the district chiefs in these 14 procurement districts the authority to place contracts for certain supplies when there is a requirement for those supplies.

Senator O'MAHONEY. There is a limitation on the character of supplies that may be purchased; is there not?

General CUMMINGS. Any item of ordnance equipment programed and sent out to the district through one of our arsenals or commodity centers is procured by the district. The district has a limitation of $10 million as being the maximum amount of the contract which it can place by negotiation without approval by the Chief of Ordnance and the Undersecretary of the Army.

Senator O'MAHONEY. Does he have discretion to determine the particular item?

General CUMMINGS. No, sir.

Senator O'MAHONEY. That is what I meant. That is done by directive from the Chief's office here in Washington; is it not?

General CUMMINGS. Yes, sir; through one of the centers or arsenals, which prescribes the item. The district procures in accordance with a prescribed specification based on a requirement originating in the office, Chief of Ordnance.

Senator O'MAHONEY. Is that deemed to be more economical than having it done from headquarters?

General CUMMINGS. Entirely, sir. It proved itself during the last World War and it is proving itself today, sir.

Senator O'MAHONEY. In what respect?

General CUMMINGS. From the standpoint of decentralization, it is the most economical method of taking care of this large procurement program.

SAVINGS THROUGH DISTRICT PROCUREMENT

Senator O'MAHONEY. What type of expense is eliminated by this operation? You must be able to put your finger on something that is saved by the decentralization.

General CUMMINGS. I feel that with our procurement covering the entire United States, it is necessary that we have on the spot the people who are familiar with the facilities and the personnel in that area.

By decentralization into 14 small groups, with a certain degree of authority within that area, I feel that we do save in overhead as compared with trying to handle all that from Washington or one central point in the United States.

Senator O'MAHONEY. Next is the item "Personal services" which I think we have discussed sufficiently in general.

Referring to page 1265, what type of quarters do you have to rent?

Mr. STOREY. Sir, this is not a type of quarters. The rents and utilities funds shown here are required for the rental of electric accounting equipment and types of machines that we require in the operation of the ordnance depots. We rent no quarters as such, or buildings as such, under this appropriation.

ORDNANCE TECHNICAL TRAINING

Senator O'MAHONEY. I think we have discussed the Army aircraft sufficiently.

Have you anything special to say about ordnance technical training, which is project 510, appearing on pages 1282, 1283, and 1284?

General FORD. Our ordnance technical training, Mr. Chairman, is one of our very important areas. We operate what is known as the ordnance schools. At these schools we train officers and also enlisted personnel.

Our officers are trained in many subjects pertaining to ordnance. The enlisted personnel are trained particularly for duties in the fields of supply, and particularly maintenance of ordnance equipment.

This is so important to us today, because, as new equipment is issued to the Army, we must have in our ordnance organizations in the field, qualified, well-trained personnel who can support the combat troops by keeping our equipment in good operating condition.

Senator O'MAHONEY. Of course, I note from previous visits to ordnance depots and from examination of some of the weapons that a high degree of education, as well as skill, is required to enable the Army personnel to operate the weapons that we have, particularly for determining range, trajectory, and the like.

That, I take it, is part of this training.

General FORD. That is part of it. Also, when the equipment has reached the stage of being unserviceable, it is sent back to our instal-

lations in the field, where we have shop facilities and personnel to recondition the matériel for return to the troops.

APPRENTICE PROGRAM

Senator O'MAHONEY. Let us have a word about the apprentice program, pages 1288 and 1289.

General FORD. I will ask Colonel Peters, if I may, Mr. Chairman, to talk on that. That comes under his particular jurisdiction.

Colonel PETERS. Mr. Chairman, the apprentice program is a long-established ordnance program. We have worked out with the Department of Labor a regular Ordnance Corps program approved by them.

We have this established now at 16—I think it is—different installations within ordnance. We train skilled tradesmen for those installations in which we are having personnel-procurement difficulty.

In other words, where we cannot hire personnel, where we cannot find enough of them, in areas like Pueblo, Colo., where we are having difficulty in hiring skilled craftsmen, we set up an apprentice-training program.

It is a 4-year program, and at the end of that time, they are qualified journeymen. They are not hired as journeymen, naturally; they are hired at prescribed rates for apprentices and are permitted to progress to 90 percent of the journeyman rate during their apprentice training.

At the end of the 4 years we have a qualified journeyman. He is sold on ordnance and we keep him on our rolls.

Senator O'MAHONEY. What is the turn-over among these apprentices?

Colonel PETERS. Very small. We lost quite a number of them 2 years ago in the reduction in force. But normally the turn-over, I would say, would be less than 1 percent.

Senator CHAVEZ. Do you generally get local boys?

Colonel PETERS. Yes, sir; and primarily veterans.

Senator CHAVEZ. I have seen the apprentice-training program at Pueblo.

Senator O'MAHONEY. How long do these workers, having been trained as apprentices, remain with ordnance?

Colonel PETERS. That is a difficult question to answer, sir. But normally they stay with ordnance because we have trained them. They learn a particular skill and it is usually concerned with armament, or some type of ordnance equipment.

REDUCTIONS IN FORCE

Senator O'MAHONEY. You spoke of reduction in force several years ago. Was that by reason of a reduction in appropriations?

Colonel PETERS. I cannot answer that in that manner, sir. We were limited as to the number of people we could have on the rolls.

General FORD. I might say, Mr. Chairman, along that line, that we have had this apprentice training at our arsenals for many, many years.

At the arsenal where I served and at establishments which I have visited I have found many cases where the shop foremen and the supervisors, started at the establishment as young boys, as apprentices,

working their way all through the grades and coming up to a very responsible supervisory position.

Senator O'MAHONEY. In other words, it is a career service.

General FORD. Yes, sir; and it works very well.

Senator O'MAHONEY. With respect to this reduction in force to which Colonel Peters alluded, have any of those who were cut off come back?

Colonel PETERS. Yes, sir. They were given first priority when we built up the program.

Senator O'MAHONEY. I am glad to know that. And, of course, you have a larger program than you had before.

Colonel PETERS. Yes, sir.

Senator O'MAHONEY. Thank you very much, Colonel Peters.

The next item, research and development, has, I think, been edited by General Maris and his aides.

I think I made the inquiry yesterday if the research and development program is moving so rapidly that it is likely to develop new weapons and superior types to those that you are about to put into production. So that by the time you have your production lines operating, you may have a better weapon.

General FORD. Yes, sir. However, under our program we can, in many cases, switch over the production to an improved model at some later date. That is particularly the case in the field of ammuntion.

Senator O'MAHONEY. But not so much the case in the field of weapons?

General FORD. Not so much, sir; particularly in the very heavy items.

AUTOMOTIVE AND COMBAT VEHICLES

Senator O'MAHONEY. We have here on page 1313, $38 million for automotive and combat vehicles. This program, of course, has to do with research and development with respect to not only improvements on existing tanks, but, I would assume, new types of tanks, does it not?

General FORD. In the case of tanks, sir, it is primarily engineering type work that is being done on the items that we are now getting into production.

RESEARCH AND DEVELOPMENT PROGRAM

Senator O'MAHONEY. What part does Ordnance play in determining the type of research that is to be carried on?

General FORD. Sir, the program is well coordinated throughout the entire Department of Defense.

As I am sure you know, Mr. Chairman, the agency known as the Research and Development Board, under the Secretary of Defense, coordinates all research and development programs for the entire Department of Defense. We work very closely with the Air Force and the Navy in fields and in areas comparable to our own, the scheme being that the Research and Development Board establishes cognizance agencies for a particular line of development or research.

Also, within the Army we are in close coordination always with our Army Field Forces, and they have several boards for particular commodities. In addition to that, the General Staff has a research and de-

velopment organization to coordinate research and development entirely within the Army .

So it is a well-coordinated program.

Senator O'MAHONEY. That was described to us by General Maris' aides. But I was intending to ask you particularly about the initiative of Ordnance in developing programs for which research is undertaken.

General FORD. We have research and development type laboratories at all of our manufacturing arsenals.

Then, in addition, there is a field which is particularly ordnance or military, and that is the field of ballistics. At the Aberdeen Proving Ground, we have our ballistics research laboratory. They do all types of research and development work.

From the information that is developed at these laboratories, we see the possibilities of the development of certain types of equipment, or certain types of ammunition. From that we may get into a field of development resulting in the production of items for tests at our proving grounds.

Senator O'MAHONEY. The ideas, then, come from within these laboratories in large degree, do they not?

General FORD. Yes, sir. We also have advisory people and consultants from educational institutions and the well-recognized, well-known laboratories throughout the United States, working with us in formulating research and development programs and helping us to solve problems in particular areas of research and development.

REVIEW BOARD FOR CAREER WORKERS

Senator O'MAHONEY. Do you have any special set-up to review the ideas that may come from your own working staff, these trained career workers that we were discussing a little while ago.

General FORD. Yes, sir. They feed right into my own office through the installations out in the field. They are analyzed in my own office and, as I say, coordinated with the research and development organization of General Staff or with the field forces, to see what may come from any ideas presented.

Senator O'MAHONEY. Are there many successful developments from such beginnings?

General FORD. Very much so, and that is the very purpose of our research and development organization. For instance, our armory at Springfield, Mass., is charged with the development of small arms. They have a laboratory there and the necessary facilities to carry out the development of these small arms.

In addition, they are backed up by other laboratories and agencies throughout the United States working on particular problems of small arms. That is true, by and large, throughout our entire field of Ordnance.

Senator O'MAHONEY. On page 1347 there are listed some reimbursements from various sources. The total is not very large, but perhaps you might have a word to say about that.

REIMBURSABLE SERVICES

Mr. STOREY. Mr. Chairman, the Ordnance Corps performs many services for other governmental agencies on a reimbursable basis. Such agencies are, for instance, the Air Force, the Navy, the National Guard, the Organized Reserves, and even the Post Office and the Atomic Energy Commission, and many other agencies.

Senator O'MAHONEY. For the Post Office?

Mr. STOREY. Yes, sir.

Senator O'MAHONEY. That is interesting. What does Ordnance do to carry the mails?

Mr. STOREY. Revolvers and ammunition, sir. Also, lending them trucks through the Army areas during the Christmas rush. There are many other types of activity, as to all of which we are required to render a service on a reimbursable basis.

There is the packing and handling, for instance, of Ordnance supplies going to the Navy, civilian components of the Army, and other customers. The amount that you see on page 1337 represents those reimbursements, sir.

Senator O'MAHONEY. How do you fix the rates?

Mr. STOREY. The rates are at actual cost, sir. In other words, on the packing and handling we have two methods of determining the rates. One of them would be a percentage of the cost of the end item; the other is on an actual cost basis, that is, what did it cost us to pack and handle the end item which they have received.

Senator O'MAHONEY. These are really reimbursements from one appropriation to the other?

Mr. STOREY. Yes, sir; they are.

Senator O'MAHONEY. In the case of the foreign aid program, for example, whatever you get on that score comes from the appropriation that Congress makes for foreign aid, does it not?

Mr. STOREY. It would, sir, except that foreign aid is funded directly. That is because it is such a tremendously large program. In other words, the money applicable to the foreign aid program is used, directly to defray the cost of packing, handling, and shipping.

Senator O'MAHONEY. I see.

Mr. STOREY. We have many, many, appropriations within Army Ordnance, and if they are large, we will then fund directly. If they are small, as many of these are, particularly the National Guard, the Organized Reserves, and the Atomic Energy Commission, they are funded by the reimbursement method.

Senator O'MAHONEY. Well, that seems to complete the Ordnance, General Ford, unless you have something more that you want to say to the committee at the moment.

General FORD. I have nothing further, sir, except to express my appreciation for being permitted to come here and tell you about the Army Ordnance job. It is certainly a very large job and will require much on our part for satisfactory accomplishment.

Senator O'MAHONEY. Well, may I say that the members of the committee are exposed to a good deal of liberal eductaion at these hearings, and I think we learn a great deal from what you gentlemen have to say. I thank you very much.

General FORD. Thank you, sir.

Senator O'MAHONEY. The Chemical Service comes next. General Kirk, we are very much obliged to you.

General DECKER. Sir, Expediting Production is the next item.

Although the Chemical Services is the next item in the book, we would like to present the other one next.

Senator O'MAHONEY. Very well, sir.

EXPEDITING PRODUCTION

STATEMENTS OF MAJ. GEN. WILLIAM O. REEDER, DEPUTY ASSISTANT CHIEF OF STAFF, G–4; COL. H. S. BISHOP, JR., CHIEF, PRODUCTION BRANCH, ASSISTANT CHIEF OF STAFF, G–4; BRIG. GEN. E. L. CUMMINGS, CHIEF, INDUSTRIAL DIVISION, OFFICE OF THE CHIEF OF ORDNANCE; MAJ. GEN. G. H. DECKER, CHIEF, BUDGET DIVISION, OCA; BRIG. GEN. M. H. DAVIS, CHIEF, AMMUNITION BRANCH, OFFICE OF CHIEF OF ORDNANCE; COL. C. K. McALLISTER, CHIEF, ESTIMATES AND FUNDING BRANCH, OCA; COL. JOHN E. PERMAN, MANPOWER CONTROL DIVISION, ASSISTANT CHIEF OF STAFF, G–1; CAPT. R. PARAGON, ASSISTANT CHIEF, PRODUCTION BRANCH, OCE; LT. COL. G. P. LERNER, ASSISTANT CHIEF, INDUSTRIAL MOBILIZATION BRANCH, OFFICE OF CHIEF SIGNAL OFFICER; AND BRIG. GEN. R. S. MOORE, SPECIAL ASSISTANT TO ASSISTANT SECRETARY OF DEFENSE, COMPTROLLER

PRODUCTION FACILITIES

Senator O'MAHONEY. I notice that the House made a little cut in Expediting Production.

General DECKER. Yes, sir.

Senator O'MAHONEY. General Reeder, you are to be the spokesman on this item?

General REEDER. Yes, sir.

Senator O'MAHONEY. Very well, sir you may proceed.

General REEDER. I should like to say before beginning the prepared statement which I have, that the title of this appropriation is perhaps unfortunate. Were we to do it again, we would change it to Provision of Production Facilities because this is not expediting production in the sense of paying overtime in order to get more rapid production.

Senator O'MAHONEY. Yes. This deals actually with the provision of the facilities, does it not?

General REEDER. That is right, sir.

Senator O'MAHONEY. This deals with the very vital subject of tooling and capital investment in new plants?

General REEDER. That is right, sir. We merely carried over from World War II the title which was then used of "Expediting Production." It has cost us nearly a year of explaining to a lot of people that it is not to pay overtime.

Senator O'MAHONEY. It has cost you not only time but money, too?

General REEDER. Possibly.

Senator O'MAHONEY. That is, in reduction of appropriations. We are here including the title. Should not the title be changed?

General REEDER. No, sir. It is the title as passed by the House.

Senator O'MAHONEY. That appears throughout the budget. They could change it, perhaps, in another year.

Senator CHAVEZ. I can see that the title is rather unhappy.

1952 BUDGET ESTIMATE

General REEDER. The estimate for fiscal year 1952 under the appropriation title "Expediting Production" totals $1.1 billion.

These funds will be used to provide necessary industrial capacity for the production of essential military items to meet the demands of approved procurement programs and to establish a production base capable of rapid expansion in the event of full mobilization. This is a continuation of the program initiated with funds available under the same appropriation title during fiscal year 1951 in accordance with the policy approved by the Secretary of Defense, the National Security Council, and the President.

Civilian production capacity is not normally adequate to produce military items in sufficient quantities to support the increased Army, including the Navy and Air Force needs in those cases where the Army has procurement responsibility for them and to build up depleted war reserves without major curtailment of civilian item production.

Army arsenals, stand-by and reserve plants, are limited as to product and can provide only a small portion of requirements, except in certain specialized fields, such as explosives, chemical munitions, ammunition loading, and armor castings.

EXPANSION AND CONVERSION PROGRAM

To attain Army production goals it is necessary to expand and convert privately owned facilities to military production, with a minimum interference to production of civilian items.

The expansion and conversion of such facilities largely involve procurement and installation of machine tools and other production equipment, with minimum acquisition of land, construction of new buildings or rehabilitation or alteration of existing structures. Since these military items have no civilian market and the equipment is peculiar to their manufacture, private industry is hesitant to undertake such capital expenditures as are necessary to provide production facilities concerned. Consequently, it becomes essential for the Government to provide the necessary funds. The Government retains title to such equipment and to any buildings financed with these funds. Expenditure of public funds has been held to a minimum by, wherever possible, securing increased production through:

(*a*) Utilizing existing private capacity or capacity expanded or created by means of private capital investment.

(*b*) Utilizing existing reserve plants rehabilitated, modernized, and expanded for production of the item for which designed, or conversion to another item when this is possible without endangering mobilization or current requirements.

(*c*) Converting existing facilities of planned contractors in any particular case by minor conversion of buildings and the installation of equipment to which the Government retains title.

(*d*) Utilizing space in Government plants either by conversion or additions to the active plant.

(*e*) Utilizing pilot and production lines established since World War II by means of phase II and III studies provided under industrial mobilization planning appropriations.

(*f*) Utilizing existing inactive facilities when suitable for the purpose for which required.

REHABILITATION OF PLANTS

The Government-owned reserve and stand-by plants must be rehabilitated, both buildings and equipment, before the plants can be placed in operation, inasmuch as only minimum maintenance has been performed since World War II because of budgetary limitations.

Senator O'MAHONEY. But we have carried items for rehabilitation to take care of these reserve buildings in other appropriations, have we not?

General REEDER. No, sir. Let me say parenthetically, that at the end of World War II we retained the plants which we selected, those thought best to keep.

For example, we have no great explosive industry. Therefore the ammonia line plants and that sort of thing we kept.

Now, the problem was how much we should put into them.

Senator O'MAHONEY. Well, my point is this, General Reeder. In Ordnance just yesterday we discussed an item—I have forgotten what the figure was—for the care of these reserve plants.

General REEDER. That is the reserve machine tools.

Senator O'MAHONEY. Yes.

General REEDER. That is right. That is different from this over-all rehabilitation.

Let me just go a step further.

Senator O'MAHONEY. My point is that this cost, so far as ordnance is concerned, is not a duplication of what you want here?

General REEDER. No, sir; there is no duplication.

Senator O'MAHONEY. But it is a separate appropriation?

General REEDER. That is right.

Senator O'MAHONEY. In addition to what you are asking for here?

REASONS FOR AMOUNT REQUESTED

General REEDER. Yes, sir. This is the big item. We could have kept those plants up to a high standard of availability, ready to go tomorrow, or within 60 days, or any particular standard. Such maintenance would have been very costly, relatively, because we didn't know when we might have war and would need the plants. It might have been 20 or 30 years. That would have been much more costly, that is, to effect such maintenance, than to keep them on a minimum standard, and then when we were ready for them, or thought we were going to be ready for them, bring them up to the highest level of maintenance.

Another reason for that is that in the course of the years, new processes are developed, and were you to maintain a World War II plant in reserve at a high degree of readiness you might have for world war III an obsolete plant in excellent shape. It is cheaper to keep the buildings standing and the machinery in fair shape, and then bring it up all at once and simultaneously incorporate the newest practices in that plant.

Permanent arsenals must be expanded, and in some cases modernized, to perform assigned missions of specialized production.

Development of new items and techniques since World War II make it desirable in many instances to alter, convert, expand, or establish new production lines in Government-owned plants.

CONSTRUCTION OF NEW PLANTS

Provision is also made for construction of a minimum number of new plants for production of items having no civilian use, where expansion of private and Government-owned facilities would not meet current or foreseeable demands. Such plants will be retained in the Army plant reserve.

Following World War II, the Army retained sufficient special-purpose plants such as explosives, powder, ammunition-loading, and chemical plants, in addition to those classed as the permanent arsenal system, to provide for approximately 40 percent of World War II capacity.

Plants of other types which might be adaptable to use in restoring productive capacity for civilian needs were made available for that purpose, namely, for the civilian economy.

As a result of this policy, manufacturing capacity represented by the permanent arsenals and stand-by plants, having an acquisition value of approximately $2,300,000,000, was maintained on a minimum basis during the peace years. Based on current costs these plants now represent a value of some $4,500,000,000. The use of less than $0.5 billion expended from fiscal year 1951 and planned expenditures from fiscal year 1952 expediting production appropriations would allow the rehabilitation of the major portion of these plants at a fraction of their present-day replacement cost and at the same time lessened the impact on the national economy which would otherwise result from added requirements for materials, manpower, et cetera, were the retained plants not available.

COST OF PLANT MAINTENANCE

Senator O'MAHONEY. What was the cost of maintenance during the period of inactivity?

General REEDER. Over the years, that has run about $23,000,000 a year for the last of 5 years. It is around $100,000,000. It was less than $23,000,000 for a while, and then we jacked it up.

Colonel DAVIS. It went down to as low as $10,000,000.

General REEDER. It is not over $100,000,000.

Senator O'MAHONEY. So that on the basis of replacement cost, the maintenance program was decidedly economical?

General REEDER. Yes, sir. It was advantageous.

Senator O'MAHONEY. How many such plants were there?

General REEDER. I have, at your request, a list of the 74 industrial plants in the Army's reserve. I have a list of them for the record. Of those, 26 are fully active. We have 32 partially active and in the process of reactivation and rehabilitation. There are 16 which are not presently required for production, which are inactive. Those are mostly explosive components, where our ammunition requirements are not great enough in volume to require their use at this time.

There is a clothing impregnation plant, a chemical plant, a couple of chemical plants, mustard, and so forth.

Senator O'MAHONEY. Most of these are really ordnance plants, are they not?

General REEDER. That is right, sir.

PLANTS IN INDUSTRIAL RESERVE

Then we have the Army-sponsored plants in the National Industrial Plant Reserve. They, of course, are maintained by General Services Administration, but we are the responsible agency in dealing with the GSA.

Senator O'MAHONEY. How many plants were constructed during World War II that were leased under option to recalling into Government use?

General REEDER. Do you have that?

Colonel BISHOP. I do not have that available here. I can supply it for the record.

General REEEDER. We might call and get that.

Senator O'MAHONEY. Of course, General Services Administration took many of these plants, I know, from the information obtained in other hearings, and I think it would be well to have that in the record.

General REEDER. All right, sir; we can supply that.

(The information requested is as follows:)

Twenty-three plants of the thirty-seven in the Army-sponsored National Industrial Plant Reserve were disposed of by the disposal agency by sale or lease under the terms of the national security clause. The remaining 14 have been maintained for future use by General Services Administration. Of the 74 Army-owned reserve plants, 8 are at the present time leased to private industry subject to recall when required for mobilization purposes. Five plants held by General Services Administration as part of the Army-sponsored National Industrial Reserve have recently been transferred to the Army. Nine special-purpose plants, not required at this time, are still in possession of General Services Administration.

There are 37 plants in the Army-sponsored National Industrial Plant Reserve, of which 13 are fully active; 7 are partially active or in process of reactivation or rehabilitation, and 17 are not presently required.

Those are almost entirely explosive components or chemical plants. There is one textile plant, one armor-plate, and one engine-parts plant in Detroit.

Senator O'MAHONEY. What are the 17 that are not presently required and how are they different from the 16 that you mentioned a little while ago?

General REEDER. These are under the General Services Administration. They differ in that they are not under the immediate control of the Army. We can get them back. In fact, as you see, we have put 13 back.

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Senator O'MAHONEY. Is there any money in this estimate for them?

General REEDER. There is no money to recover these except to rehabilitate them where we are rehabilitating them and putting them back into use. There will be money for seven of the plants in process of rehabilitation.

For example, there is the General Motors Corp. Fisher body plant at Flint, Mich. That was used by Buick in their spare-parts work.

Senator O'MAHONEY. There is nothing in this item for the 74 industrial plants which are now in use—or is there?

General REEDER. Yes, sir. You will find money all through here for them.

Senator O'MAHONEY. I know that money for them is to be found all through the budget, but under "Expediting production" is there any money for the 74?

General REEDER. Yes, sir.

Senator O'MAHONEY. All right. For what particular operation?

General REEDER. Well, I don't say that there is money for each of the 74, but there will be extension of work in machine tools.

Senator O'MAHONEY. Well, General, this is really what I want to find out: To what extent are there appropriations elsewhere in the budget which will be expended on these plants, and to what extent will the appropriation under "Expediting production" be sufficient for the plants?

General REEDER. All right, sir.

Let me just take one more example, the Cleveland Tank Plant, at Cleveland, Ohio.

That is where we are making the light tanks. That is one of our reserve plants. We put that plant back into shape for the light tanks with money from Expediting Production. The cranes, for example, were not strong enough to lift the parts of the tank, and they had to be replaced.

The floors, I believe, had to be reinforced.

DISPOSITION OF CRANES

Senator O'MAHONEY. What did you do with the old cranes?

General DAVIS. That was originally an aircraft plant, Mr. Chairman, and they never made tanks there.

Senator O'MAHONEY. Well, I can understand that you needed better cranes.

General REEDER. The question is: Who got the old cranes?

Senator O'MAHONEY. What did you do with the old cranes?

General CUMMINGS. At the time I saw the plant, it had no crane equipment in it whatever. It was being used for the storage of tanks.

General DAVIS. It was being used for the storing of beans for the Department of Agriculture when I first saw it.

General REEDER. The crane equipment had been removed previously.

General CUMMINGS. Had there been any cranes, they would have been placed in reserve.

General REEDER. I believe the building was not strong enough, and I understand that before putting in the cranes, they had to increase the structural strength to carry the load.

Senator O'MAHONEY. As you stated the proposition, you were talking about replacing the lighter cranes with heavier cranes, and so I wondered what had been done with the lighter cranes.

General REEDER. It was to work heavier weights that we put in the cranes.

Senator O'MAHONEY. I understand that.

General REEDER. The money to put that plant in operation comes out of Expediting Production, and was used to put it into good shape.

FUNDS FOR TOOLING

Now, the other money that will be used there from another appropriation is the tooling money, the money for the jigs, fixtures, and dies.

There is, for example, the plate with holes in it which shows where to bore when you get a casting underneath it. You put that into the drill on top of the piece.

Senator O'MAHONEY. Why should not this all be in one appropriation item?

General REEDER. Custom has decreed more or less that you separate purely capital expenditures, those which have a long life, from those which have a relatively short life. Now, the jigs, fixtures, and dies—the tooling, as we call them—are associated very directly with the item you are making.

The man who is going to make a template gets the drawings of the thing he is going to work on. He lays out with calipers, dividers, and all sort of things, what he wants, and then he makes the template, so that he can set that down on each piece as it comes along.

When he drills the holes through there, his job is done.

When we cease to make the light tank, for example, those jigs, fixtures, and dies cease to have any value except as junk.

Senator O'MAHONEY. Except as junk?

General REEDER. Or to put them away against the time you may make the light tank again. These also wear out more rapidly than machine tools.

Senator CHAVEZ. I can see the reason for the change all right, but why cannot the complete job be done by one agency out of one appropriation?

General REEDER. Well, it could be, except that we have become accustomed to associate with the production cost of an item like the tanks those jigs, fixtures, and dies which are peculiar to it.

Senator CHAVEZ. I see. It is a custom of the trade?

General REEDER. Yes, sir. Ordnance is a big trade. If you get an $8 billion business, you have a big trade.

Senator O'MAHONEY. It would give the committee a better understanding of the entire cost if this could be placed in one item. I think you could, without a great deal of difficulty, before this record is prepared, go through the appropriation and give us a table showing the amount for Expediting Production and the amount in other appropriations that have to do with these plants.

General REEDER. We can, sir.

Senator O'MAHONEY. I mean, aside from the mere operation of them.

General REEDER. It won't be an instantaneous business, however. There is really quite a bit of work to take out the tooling.

Senator O'MAHONEY. Well, now, you have gone into such great detail in the preparation of this budget that I was under the impression that it would merely mean that General Cummings or the budget experts could just go through this and bring those items together.

General REEDER. No, sir; the budget experts cannot—and I will tell you why:

Take "ammunition"—the money for tooling which will show under a round of ammunition is scattered to many firms. The projectile bodies will be made by commercial manufacturers. I believe Thor Washing Machine Co., for example, makes some. If the manufacturer does not have the tools, he will have to get a portion of the money to use for tooling. He must necesarily have the jigs, fixtures, and dies. He gets some of the money that is included under the cost of the ammunition. Somebody else may be making the cartridge case and he may get a portion of the money.

Senator O'MAHONEY. As I see it, the distinction is merely this: that the tools which are used for the purpose of producing a particular implement or weapon or vehicle at the particular time are considered a part of the expenditure, under the production of that weapon and not a part of the plant itself?

General REEDER. That is right, sir.

Senator O'MAHONEY. And you are talking here about the permanent tools, whatever they might be?

General REEDER. That is right.

For example, take a template. With a template alone, you can't drill any holes.

You must have the big drill press. So the template has no innate value in itself except as associated with the thing it is used with in making the end item.

General DAVIS. I believe, Mr. Chairman, the best distinction you can make is right in the terminology that we normally use for these aids to manufacture, the actual cutting tools which go on the machine tools. We call them perishable tools, and they are in substance that.

On the other hand, the machine tools have a very long life, and are adaptable by modification, that is, with or without modification, to other jobs.

The perishable tool is something which pretty nearly disappears with your contract.

Senator O'MAHONEY. The perishable tools, then, are not accounted for in this item of expediting production?

General DAVIS. Only in the end item of expediting ordnance or other matériel.

Senator O'MAHONEY. All right.

The statement entitled "Status of Reserve Plants" will be inserted in the record at this point.

(The statement referred to is as follows:)

STATUS OF RESERVE PLANTS

1. The Department of the Army presently has 74 industrial plants in the departmental industrial plant reserve and 37 industrial plants in the national industrial plant reserve for which the Army is sponsor. These reserve plants are limited as to product and can provide only a small portion of the Army requirements except in certain specialized fields such as explosives, chemical munitions and ammunition loading. Of the 74 departmental industrial reserve

plants, 26 are considered to be fully active; 32 are partially active or in the process of being reactivated and rehabilitated; and 16 are inactive (not on Army production). Of the 37 Army sponsored national industrial reserve plants, 13 are considered to be fully active; 7 partially active or in the process of being reactivated and rehabilitated; and 17 are inactive (not on Army production).

2. The industrial plants included in the departmental reserve and Army sponsored national industrial reserve by present status are as follows:

A. DEPARTMENT OF THE ARMY INDUSTRIAL PLANT RESERVE (74)

Plants fully active (26)

1. Aberdeen Proving Ground, Aberdeen, Md.
2. Detroit Arsenal, Detroit, Mich.
3. Edgewood Ordnance Assembly Plant, Edgewood, Md.
4. Erie Proving Ground, Lacarne, Ohio.
5. Frankford Arsenal, Philadelphia, Pa.
6. Lima Ordnance Depot, Lima, Ohio.
7. Picatinny Arsenal, Dover, N. J.
8. Redstone Arsenal, Huntsville, Ala.
9. Rock Island Arsenal, Rock Island, Ill.
10. San Jacinto Ammonia Works, Houston, Tex.
11. Springfield Armory, Springfield, Mass.
12. Watertown Arsenal, Watertown, Mass.
13. Watervliet Arsenal, Watervliet, N. Y.
14. Army Chemical Center (Edgewood Arsenal), Edgewood, Md.
15. Jeffersonville QM Depot, Jeffersonville, Ind.
16. Philadelphia QM Depot (Production Division), Philadelphia, Pa.
17. Army Map Service, Washington, D. C.
18. Engineer Board, Fort Belvoir, Va.
19. Cactus Ordnance Works, Dumas, Tex.
20. Chevrolet Shell Plant, St. Louis, Mo.
21. Chicago Ordnance Plant, Chicago, Ill.
22. Cleveland Tank Plant, Cleveland, Ohio.
23. Malta Test Station (Hermes project), Schenectady, N. Y.
24. Jet Propulsion Laboratory (ORDCIT project), Pasadena, Calif.
25. Dugway Proving Ground, Tooele, Utah.
26. QM Experimental Fuels Station, Louisiana, Mo.

Plants partially active or in process of reactivation and rehabilitation (32)

1. Badger Ordnance Works, Baraboo, Wis.
2. Burlington Ordnance Plant, Burlington, N. J.
3. Cornhusker Ordnance Plant, Grand Island, Nebr.
4. Dickson Gun Plant, Houston, Tex.
5. Holston Ordnance Works, Kingsport, Tenn.
6. Indiana Arsenal, Hoosier Ordnance Plant, Charlestown, Ind.
7. Indiana Arsenal, Indiana Ordnance Works, Charlestown, Ind.
8. Iowa Ordnance Plant, Burlington, Iowa.
9. Jefferson Proving Ground, Madison, Ind.
10. Joliet Arsenal, Elwood Ordnance Plant, Joliet, Ill.
11. Joliet Arsenal, Kankakee Ordnance Works, Joliet, Ill.
12. Kansas Ordnance Plant, Parsons, Kans.
13. Kingsbury Ordnance Plant, LaPorte, Ind.
14. Lake City Arsenal, Independence, Mo.
15. Louisiana Ordnance Plant, Shreveport, La.
16. Michoud Ordnance Plant, New Orleans, La.
17. Milan Arsenal (Wolf Creek Ordnance Plant), Milan, Tenn.
18. Nebraska Ordnance Plant, Wahoo, Nebr.
19. Niagara Falls Plant, Niagara Falls, N. Y.
20. Radford Arsenal, Radford Ordnance Works, Radford, Va.
21. Ravenna Arsenal (Ravenna Ordnance Plant), Apco, Ohio.
22. Red River Arsenal (Lone Star Ordnance Plant), Texarkana, Tex.
23. Ridgewood Ordnance Plant, Cincinnati, Ohio.
24. Riverbank Ordnance Plant, Riverbank, Calif.
25. Rockford Ordnance Plant, Rockford, Ill.

26. St. Louis Ordnance Plant, St. Louis, Mo.
27. Sunflower Ordnance Works, Lawrence, Kans.
28. Twin Cities Arsenal, Minneapolis, Minn.
29. Wabash River Ordnance Works, Newport, Ind.
30. New Cumberland Plant, New Cumberland, Pa.
31. Pine Bluff Arsenal, Pine Bluff, Ark.
32. Rocky Mountain Arsenal, Denver, Colo.

Plants not on Army production (16) (to be reactivated for planned product when required)

1. Alabama Ordnance Works, Sylacauga, Ala. (explosive components).
2. Cherokee Ordnance Works, Danville, Pa. (leased to planned operator) (explosive components).
3. Longhorn Ordnance Works, Karnack, Tex. (explosive components).
4. Maumelle Ordnance Works, Little Rock, Ark. (explosive components).
5. Morgantown Ordnance Works, Morgantown, W. Va. (explosive components).
6. National Tube Co. (Christy Park Works), McKeesport, Pa. (shell components).
7. Radford Arsenal, New River Ordnance Plant, Radford, Va. (explosive components).
8. Volunteer Ordnance Works, Chattanooga, Tenn. (explosive components).
9. Habus Plant, Columbus, Ohio (clothing impregnation).
10. Kansas City Plant, Kansas City, Mo. (clothing impregnation).
11. Marshall Plant, New Martinsville, W. Va. (leased to planned operator) (chemicals).
12. Owl 4X Plant, Azusa, Calif. (leased to planned operator) (classified product).
13. Pantex Ordnance Plant, Amarillo, Tex. (Army-operated for non-Army classified product).
14. St. Louis Chemical Plant, Monsanto, Ill. (leased to planned operator) (XXCC 2 and 3).
15. Seattle Chemical Plant, Seattle, Wash. (leased) (chemicals).
16. Vigo Plant, Terre Haute, Ind. (leased) (classified product).

B. ARMY-SPONSORED, NATIONAL INDUSTRIAL PLANT RESERVE (37)

Plants fully active (13)

1. Bridgeport Brass Co., Indianapolis, Ind., Plancor 59.
2. Columbia Steel Co., Pittsburgh, Calif., Plancor 516.
3. Continental Aviation & Engineering, Muskegon, Mich., Plancor 166M.
4. Continental Foundry & Machine Co., Coraopolis, Pa., Plancor 294.
5. Continental Foundry & Machine Co., E. Chicago, Ind., Plancor 338.
6. General Electric Company, Syracuse, N. Y., Plancor 788.
7. Jayhawk Ordnance Works, Pittsburgh, Kans., WD 222.
8. Lehigh Foundries, Inc., Easton, Pa., Plancor 2354.
9. Lima Tank Arsenal (Lima Locomotive Works), Lima, Ohio.
10. Ohio River Ordnance Works, Henderson, Ky., WD 315.
11. Pittsburgh Steel Foundry Co., Glassport, Pa., Plancor 659.
12. Symington-Gould Corp., Depew, N. Y., AP 64.
13. Timken Detroit Axle Co., (Melvindale Forge Plant), Melvindale, Mich., WD 289.

Plants partially active or in process of reactivation or rehabilitation (7)

1. American Steel Foundries, Indiana Harbor, Ind., Plancor 269.
2. General Motors Corp. (Fisher Body Division), Flint, Mich., Plancor 317.
3. Mergenthaler Linotype Co., Brooklyn, N. Y., Plancor 472.
4. Ohio Steel Foundry Co., Lima, Ohio, Plancor 473.
5. Pacific Car & Foundry Co., Renton, Wash., Plancor 303.
6. Scullin Steel Corp., St. Louis, Mo., Plancor 1672.
7. Timken Detroit Axle Co., Detroit, Mich., WD 281.

Plants not on Army production (17) (to be reactivated for planned product when required)

1. Arkansas Ordnance Plant, Jacksonville, Ark., WD 341 (explosive components).
2. Aviation Corp., Detroit, Mich., Plancor 76 (engine parts).
3. Bluebonnet Ordnance Plant, McGregor, Tex., WD 340 (explosive components).
4. Chickasaw Ordnance Works, Millington, Tenn., WD 332 (explosive components).
5. Gary Armor Plate Paint (Carnegie Illinois Steel Corp.), Gary, Ind. (Armor plate).
6. Gopher Ordnance Works, St. Paul, Minn., WD 386 (explosive components).
7. Green River Ordnance Plant, Dixon, Ill., WD 278 (explosive components).
8. Gulf Ordnance Plant, Aberdeen, Miss., WD 468 (explosive components).
9. Illinois Ordnance Plant, Carbondale, Ill., WD 286 (explosive components).
10. Keystone Ordnance Works, Meadville, Pa., WD 300 (explosive components).
11. Koppers, Inc. (Bartlett-Hayward Division), Baltimore, Md., WD 301 (machine works).
12. Oklahoma Ordnance Works, Pryor, Okla., WD 499 (explosive components).
13. Plum Brook Ordnance Works, Sandusky, Ohio, WD 54A (explosive components).
14. Stevens & Co., Milledgeville, Ga. (textiles).
15. Weldon Spring Ordnance Works, Weldon Spring, Mo., WD 618 (explosive components).
16. West Virginia Ordnance Works, Point Pleasant, W. Va., WD 650 (explosive components).
17. W. F. & John Barnes Co., Rockford, Ill., Plancor 1582 (chemicals).

INDUSTRIAL PLANT RESERVE

General REEDER. Additionally the structures for such plants as the Cleveland Tank Plant, the Michoud Ordnance Plant, the Riverbank Ordnance Plant, the Burlington Ordnance Plant, and others of that character were made available from the National Plant Reserve at no cost to the Army, requiring only minor structural modifications and the installation of production equipment to provide complete manufacturing facilities.

It is planned that, with the assistance of the Congress, it will be possible to retain under Army control these various plants as a reserve following the present emergency. In those cases where equipment has been installed in private plants, title remains in the Government. It is planned that these items shall form a balanced reserve remaining available in cases of future emergencies, though to the maximum extent possible turned over to civilian use under such proper protective license as to protect the Government's interests and assure continued availability when required.

The detailed proposed project estimates, submitted separately from the budget estimates, are indicative of the types of projects on which it is proposed to use these funds. However, to serve the purpose for which these funds are to be applied, flexibility in their use must be preserved.

The need for such flexibility has in the past been justified in both World War II and during the present emergency to provide for changing requirements, based on combat experience, need for rapid-production capacity due to newly developed and proven ideas, need for improving design of existing equipment and similar conditions which prevent firm determination of facility requirements in advance, as it necessary in the usual procedures for budget submissions.

An example illustrative of this arises from the rapid development in the guided-missile field, and need for additional facilities as improvements pass from the research and development stage to production.

The same condition exists in the case of tank production, chemicals, classified agents, and signal equipment.

Senator O'MAHONEY. Off the record.

Now, General, if you would be good enough to repeat your statement for the record?

General DAVIS. I stated that one of the important difficulties that we have in estimating precisely these individual items of rehabilitation is the fact that we cannot tell what is the condition inside, equipment, pipes, and items of that sort, in our powder and explosives plants. We have had in the experience of the last year, in rehabilitation activities, a constant demand for a shift of funds between projects. For that reason, some of that has cost us considerably less than we expected and others have cost us considerably more.

I think it is inherent in the rehabilitation of a chemical plant—and that is what these plants are—which has been in stand-by for 6 years.

Senator CHAVEZ. That is the reason for General Reeder's statement that it is desired to have flexibility.

General REEDER. That is right, sir. While our error in the price of a tank may be off 10 percent, here we are apt to be off 100 percent in an individual estimate.

Senator O'MAHONEY. You may proceed, General.

General REEDER. The manner in which these funds have been utilized under previous-year appropriations is indicated by the following data:

(The material referred to follows:)

	Funds authorized, fiscal year 1951 (other than fourth supplemental)[1]
Government-owned plants and arsenals rehabilitated and modernized	$262,000,000
Government-controlled plants	116,000,000
Privately owned plants	287,000,000
New plants	35,000,000
Total	700,000,000

[1] Projects amounting to $88 million have been approved against the fourth supplemental appropriation of $400 million. Other projects totaling approximately $100 million are being processed at the present time. The balance of the fourth supplemental is tentatively programed in accordance with approved policy.

The $700 million fiscal-year-1951 funds have been allocated to technical services as follows:

	Ordnance	Signal	Chemical
Government-owned plants and arsenals rehabilitated and modernized	$260,000,000	0	$2,000,000
Government-controlled plants	116,000,000	0	0
Privately owned plants	267,000,000	$20,000,000	0
New plants	0	0	35,000,000
Total	643,000,000	20,000,000	37,000,000

The manner in which it is tentatively proposed to use the funds requested for fiscal year 1952 is shown by the following data:

	Ordnance	Chemical	Signal	Engineers
Government-owned plants and arsenals rehabilitated and modernized	$163,000,000	$38,720,000	0	
Government-controlled plants	25,000,000	0	0	0
Privately owned plants	725,829,000	8,223,000	$50,000,000	$14,228,000
New plants	37,000,000	33,000,000	0	5,000,000
Total	950,829,000	79,943,000	50,000,000	19,228,000

EXPANSION OF PRIVATELY OWNED FACILITIES

Senator O'MAHONEY. Now, with respect to the expenditure of $287,000,000 in privately owned plants, we had a discussion about that on the supplemental bill, either the Ordnance or the Navy or with both.

As a matter of fact, I think we reduced the appropriation in one particular because of brick and mortar additions to private facilities.

What are your plans now under this appropriation for the expansion of privately owned facilities?

General REEDER. We do the absolute minimum that we can. Now, in the case of machine tools, which are movable, and which we can get out, we have very little objection, if it is necessary to provide those, as we can take those out.

Senator O'MAHONEY. Yes. There is no objection on the part of the committee to that because the machine tools remain Government property and can be removed.

General REEDER. But we do not want to build any plants for private ownership. We would build new plants for Government ownership and possibly contractor operation.

Now, in the privately owned plants, sometimes you do have to do some construction work, and you are frankly over the barrel on that, because you can't very well remove it.

Senator O'MAHONEY. Well, I had in mind the tremendous headache in surplus property disposal after the shooting stopped, in disposing of so-called scrambled facilities.

General REEDER. Yes, sir. We avoid that just as far as we possibly can, because we know that we get right into it with the War Assets Administration or its successor.

Senator O'MAHONEY. The Government is at a great disadvantage in such circumstances.

General REEDER. That is right.

Senator O'MAHONEY. What steps do you take to reduce that disadvantage? Sometimes it is unavoidable.

General REEDER. It is only when it is unavoidable that we do that; and we try to limit the investment as far as possible, because we know that we are in a spot.

Senator O'MAHONEY. Where it is necessary to provide additional facilities for private plants, facilities which are designed to produce an item that the private plant would never produce except for the preparedness program, is it not possible to have such facility built in such a way that while it would be adjacent to the private facility, it would still be separate and apart from it?

General REEDER. Sometimes we can do that. It isn't always successful even then.

There was a place up in New England which I think was the plant of a machine-tool maker, where that had been done in World War II. When it came to dispose of it, nobody wanted it. The machine-tool maker said that he didn't want it because he said his peacetime business wouldn't support his old plant and that one, too. We didn't even win then.

(There was a discussion off the record.)

Senator O'MAHONEY. May I ask you on the record, while we are waiting for Mr. Baruch to come down, how much money there is in this estimate for the construction of facilities for privately owned plants, exclusive of tools?

General REEDER. What you are after is the actual money which you expect to put into them?

Senator O'MAHONEY. I believe you have a table, General, which you referred to.

General REEDER. That is right, sir. It does not show what is machine tools and what is construction.

Senator O'MAHONEY. The table from which you are reading on page 5 of your statement showed $287,000,000 authorized for privately owned plants, except for the amount in the fourth supplemental bill.

I would like to have that breakdown or a comparable breakdown for the $1,100,000,000 which you have in this budget.

General REEDER. Yes, sir.

Well, we have six factories, in which we are going to carry on construction on non-Government-owned land. They are General Steel Casting Corp., at Granite City, Ill.; General Steel Casting Corp., at Eddystone, Pa.; Food Machinery & Chemical Corp., San Jose, Calif.; Consolidated Western Steel Co., at Berkeley, Calif.; Michoud Ordnance Plant, New Orleans, La.; and Western Electric Co.'s Hawthorne plant, in Chicago, Ill.

Senator O'MAHONEY. Now, it may be that you have answered this question in the balance of your statement.

General REEDER. No, sir; I am sure I have not.

The total of this, if this were correct, would be $51,000,000.

Senator O'MAHONEY. Suppose you supply that for the record, then?

General REEDER. Yes, sir; we will add that to the record.

(The information referred to is as follows:)

Of the $51,000,000 approved for expansion of the above 6 plants, approximately $3,400,000 is for the construction of buildings on the company-owned land. To the extent possible, all structures are of temporary demountable type so that they may be removed for use at other locations when no longer required by the operating company. The remaining funds in these projects covers minor building alterations, equipment and the cost of installation of this equipment. As in other cases title to the equipment remains in the Government.

1951 SUPPLEMENTAL FUNDS

Senator CHAVEZ. What would be the difference between the $287,000,000 that you had for 1951 and the item in this bill?

General REEDER. It will be a further extension, I believe. When we get into the details, I believe they will show what was used in 1951 and what has been put in for 1952. It is the same kind of work. We did about $700,000,000, and then the fourth supplemental bill carried

another $400,000,000, so that we had in the fiscal year 1951 $1,100,000,000.

Senator CHAVEZ. That is the total?

General REEDER. Yes, sir.

Senator CHAVEZ. But what we are discussing right now is the difference between the privately owned plants item of $287,000,000 in 1951 and what would be the amount in the 1952 bill.

General REEDER. Yes, sir. This is the total at the present time of both, the total production we presently have on non-Government-owned land.

BREAKDOWN OF AMOUNT FOR EXPANSION OF PRIVATE PLANTS

Now, what we have done is to show in the statement three segments of the program. The first is what we did with the first $700,000,000. Then we show how we proposed and are using the additional $400,000,000. Then we show finally the 1952 plan, which appears at the top of page 6 and which shows that we will use in Government-owned plants and arsenals for rehabilitation and modernization $163,000,000 in ordnance plants, $38,720,000 in chemical plants.

In Government-controlled plants by the ordnance, we will use $25,000,000; in privately owned plants for the ordnance we will use $725,829,000; for chemical plants we will use $8,223,000; for signal, we will use $50,000,000; and for the engineers, we will use $14,228,000.

Senator CHAVEZ. That is the answer, then?

General REEDER. Yes, sir. Further, in constructing new plants, we will use $37,000,000 for ordnance, $33,000,000 for chemical and $5,000,000 for the engineers.

Senator O'MAHONEY. Now, you see, that indicates my interest in propounding the question, because it is proposed for Ordnance to spend three-quarters of the entire sum in privately owned plants.

General REEDER. That is right.

Senator O'MAHONEY. Now, some of that is for tooling?

General REEDER. The major part—almost all of it.

Senator O'MAHONEY. What I wanted you to do was to segregate the tooling from the brick and mortar appropriation, you see.

General REEDER. The little brick and mortar part—we will not be able to do that too well. For example, let us take the case of a manufacturing plant which, because of a different arrangement, had, say, 300 men on the floor.

With this thing to be made in his plant, he will have 500 men on the floor. His toilet facilities are inadequate.

Senator O'MAHONEY. I do not have in mind small modifications of a plant, of that kind. I have in mind the construction of additional facilities.

General REEDER. That is right; sir. We will get that. I just wanted to be clear, so that there would be no misunderstanding.

Colonel BISHOP. Roughly, 80 percent of that is tools.

(The information referred to is as follows:)

Insofar as present information is available, the funds set up for the expansion of privately owned plants does not contemplate any additional facilities except by the installation of equipment and minor internal plant modifications necessary in connection with the changed production. It is possible that in a few minor cases, which annot be stated at this point, construction may occur, but this will be the exception and only resorted to when no other course remains open to the Army.

CONTROL OF EXPEDITING PRODUCTION FUNDS

The Secretary of the Army has established rigid controls over these funds to insure that maximum advantage to the defense effort results from their use. Each plant expansion, rehabilitation, conversion, or new facility, is the subject of a separate project request describing in detail the need for the project related to scheduled requirements.

Project requests originate in the technical services, and before submission to the office of the Under Secretary of the Army are carefully screened and coordinated by the Procurement Division, Office, Assistant Chief of Staff, G–4, as to need for the project, proper application of funds, and existence of available facilities, in accordance with previously stated criteria.

All project requests require the approval of the Under Secretary of the Army.

Senator O'MAHONEY. Let me read from the House report at this point several paragraphs which appear on page 9 of the report submitted by Congressman Mahon to the House of Representatives, under date of August 6, 1951, under the heading Expediting Production.

The request for appropriation for expediting production in the amount of $1,100,000,000 is based upon the need for additional production facilities to provide sufficient production capacity to meet current procurement objectives, and to provide a production base which could be rapidly expanded.

The program was inaugurated during fiscal year 1951 from appropriated funds in the amount of $1,100,000,000 and the funds requested herein are to continue the program for increased productive capacity required to supplement current and foreseeable Army needs, and those needs of the Navy and Air Force for which the Army has procurement responsibility, and at the same time broaden the mobilization base.

The funds will be used for the limited purchase of land, conversion, construction, rehabilitation, or expansion of facilities, and purchase and installation of production equipment in both Government and privately owned plants necessary to support the program.

The committee was advised that the use of these funds will be held to a minimum consistent with the objectives to be attained, both as to military preparedness and maintenance of civilian item production, with the minimum possible degree of interference.

The funds are placed under the control of the Secretary of the Army to enable him to meet emergency conditions, and to provide for changing requirements based on combat experience, need for rapid production capacity, due to newly developed and proven items, need for improving design of existing equipment and similar conditions, which prevent firm determination of facility requirements in advance, as is necessary in the unusual procedures and rapid developments.

Approximately one-third of the funds requested herein are required and will be used in support of the Navy and the Air Force, particularly in the fields of small arms, artillery, trucks, tanks, and bombs, which the Army procures or manufactures for the three services.

The committee recommends a reduction of $100,000,000, leaving a balance of $1,000,000,000 to perform the activities necessary in the program and directs that a revaluation of the program be made.

When the Department again reports to the committee, the latest information concerning the needs of this program should be presented.

The committee feels that every effort should be made to effect economies, without injury to the program, and is providing herewith a rather large amount for the program. If it is found impossible to effect the suggested saving, the matter can be again considered by the Congress later in the year.

Have you any comment to make on that statement from the report?

General REEDER. I have no comment other than to agree with it, sir. As you see, from the very character of this business, our estimate could be $100,000,000 wrong.

Senator O'MAHONEY. Then you have no objection to the reduction of $100,000,000?

General REEDER. I have no objection to it. The statement is very clear that when we have gone further we can re-present our case.

Senator O'MAHONEY. Now, if the estimate might be $100,000,000 wrong, perhaps it might be $200,000,000 wrong.

General REEDER. Yes, sir; that is right; but I think that is too close to the bone.

Senator O'MAHONEY. Well, on what ground do you say that, sir?

General REEDER. Well, I say that principally on this basis: We could also be $100,000,00 too low with this estimate of $1,100,000,000.

Senator O'MAHONEY. We are dealing here, General, with the construction of facilities, and not with the production or purchase or the procurement of weapons, tanks, vehicles, and the like, are we not?

General REEDER. That is right, sir. These are the things which make them possible.

Senator O'MAHONEY. Yes. We are here talking about the production line and all the facilities that go to make the production line possible.

Now, the theory upon which we are operating, as I understood the testimony of Secretary Lovett and the Secretaries of the three branches, is that we shall in this budget prepare the basic facilities to produce the things that we would need if a war should come.

General REEDER. Partly that, and partly to produce the very things that you have been listening to in terms of end items.

Senator O'MAHONEY. I have not finished yet—and only a portion of the end items that would be needed.

The testimony which has been presented indicates that.

General REEDER. That is right, sir.

Senator O'MAHONEY. So my question to you is this: To what extent will this budget estimate for expediting production provide us with the needed facilities for such a program as outlined by the Secretary?

General REEDER. It will do it. It is intended to do just that—to provide the facilities which we require for our present program, plus an over-tooling so that we can get larger production out of those facilities in an emergency.

Senator O'MAHONEY. Now, my own judgment is, frankly, that we should not temporize with tooling, because that is the obstacle which is causing the lag, and we ought to do whatever may be necessary to provide the tools, because if you do not have the tools, you cannot possibly have the end items.

General REEDER. That is right.

Senator O'MAHONEY. You cannot possibly have them with the speed that is necessary. So tools, from my point of view, come first.

Do you not agree with that?

General REEDER. Yes, sir.

Your question then is why I am willing to accept the $100,000,000 as a reduction?

Senator O'MAHONEY. Yes.

MACHINE-TOOL INDUSTRY

General REEDER. Because the machine-tool industry has not been expanded and taken care of as we think it should have been. The Army began even before Korea, urging that steps be taken to provide against the situation which has occurred. At any rate, we are now in that situation, and we cannot buy and get delivery of machine tools as rapidly as we had hoped and expected.

Senator O'MAHONEY. Well, what should we do to get them?

General REEDER. I don't know that there is anything that the Congress can do at the moment, sir.

Senator O'MAHONEY. Well, is there any reason to believe that Ordnance itself in some of its arsenals could actually produce the machine tools that would be required, or a substantial part of them?

General REEDER. I don't think so.

General CUMMINGS. I don't think so, sir, without preventing them from carrying on some of their other essential ordnance work. We are not tooled up or geared up for that kind of operation.

Senator O'MAHONEY. Now, one of the plans that the Office of Defense Mobilization is considering, as I understand it, is to utilize some of the big motor factories.

General CUMMINGS. Yes, sir.

Senator O'MAHONEY. It will be for the purpose of manufacturing tools, because the tool makers are in the same position that General Reeder described only a little while ago, with respect to one, where the additional facility had been built. They would have no use for the facilities necessary to build the tools after the emergency is over. Therefore, they do not want to build the facilities.

That being the case, the purpose seems to be to divert certain of the motor vehicle facilities to the manufacture of the tools. That, of course, means a sacrifice to some extent of end items, does it not?

General REEDER. Yes, sir; depending upon whether we took plants devoted to defense production or took over plants devoted to the production of items for civilian consumption.

General CUMMINGS. It is intended, I believe, sir, that that be done in the portion of the automotive industry devoted to civilian production at present, but I know of no indication that it is contemplated in any of the defense activities of those corporations.

Senator O'MAHONEY. I see.

General REEDER. My acceptance of the reduction at this time without argument is because of the condition of the machine tool industry. The money won't produce the tools, and we can ask for it later, as Mr. Mahon, in his report, suggests.

Senator O'MAHONEY. Well, if you have any suggestions to make to the committee with respect to curing this bottleneck in machine tools, I wish you would do it.

General REEDER. Well, sir, we have none at the moment.

Senator O'MAHONEY. I think that finishes the item of expediting production.

Senator, do you want to ask any further questions?

Senator CHAVEZ. No, sir.

Senator O'MAHONEY. Do you want to add anything else?

General DAVIS. I was wondering whether this would answer the question:

INDUSTRIAL PLANT RESERVE

The question was directed as to how many of the 37 plants controlled by the General Services Administration have been leased, and so forth.

General REEDER. No. I think the chairman referred more to how many were leased in the period between the end of World War II and Korea, and how many stood idle.

Senator O'MAHONEY. How many are outstanding under lease and have not been reclaimed?

General REEDER. Well, I can give you that quickly.

Of the 37 plants in the national industrial plant reserve, sponsored by the Army, 13 are now fully active. There were seven sold under the national-security clause, which are now back producing for the Army. Six were reclaimed from the Public Buildings Administration. I do not know whether those have been leased or not. They have not been leased, I believe. They have been used by the Public Buildings Administration.

Seven plants are partially active; two were sold under the national-security clause, and are being activated. Five more are being reclaimed from the Public Buildings Administration.

Well, that is not the answer to the question. What you wanted to know is how many of these plants were under lease and being used.

Senator O'MAHONEY. Your testimony was that 40 percent of the plants were retained by the Army?

General REEDER. That is right. Forty percent of World War II capacity limited to special-purpose plants.

Senator O'MAHONEY. That meant that 60 percent were turned over to Surplus Property.

General REEDER. Yes, sir, in the case of the special-purpose plants.

Senator O'MAHONEY. And to the General Services Administration.

General REEDER. Yes, sir.

Senator O'MAHONEY. Now, I think most, if not all, of them, were turned over under contracts which had a clause in them authorizing the Government to reclaim them in case of an emergency. Some of these you have reclaimed. You have given us a list of them.

I was trying to get the final category, the number of plants that were originally turned over to Surplus Property which have not yet been reclaimed but which can be reclaimed, and what, if any, there are which cannot be reclaimed.

General REEDER. Well, we have the number that can be reclaimed. That is 17.

Senator O'MAHONEY. Suppose you just have that done and inserted in the record.

General REEDER. We will do that, sir.

Senator O'MAHONEY. We will then have a complete picture of that.

(The information referred to is as follows:)

One hundred and seventy-seven RFC-financed and ninety-three War Department-financed plants were declared surplus to RFC and succeeding disposal agencies following World War II. In 1947, when the national security clause procedures were made available, 23 of the remaining plants, following a careful screening, were sold or leased under the provisions of this clause. It has not been necessary to recapture any of the plants leased or sold to private industry under the terms of the national security clause as in all cases the present owners have cooperated and converted to production of Army items when required to do so.

Senator O'MAHONEY. Now, General Decker, what is your plan for this afternoon?

General DECKER. We plan to bring on the Medical and Hospital Department this afternoon, sir. They will be followed by the Signal Corps.

Senator O'MAHONEY. Well, suppose we recess, then, until 2:30?

General DECKER. All right, sir.

Senator O'MAHONEY. Thank you very much, General Reeder.

AFTERNOON SESSION

The hearing reconvened at 2:30 p. m., upon the expiration of the recess.

Senator O'MAHONEY. We will come to order.

We have before us next the Medical and Hospital Department of the Army.

ARMY MEDICAL AND HOSPITAL DEPARTMENT

STATEMENTS OF BRIG. GEN. P. I. ROBINSON, ACTING SURGEON GENERAL; LT. COL. J. J. STRNAD, CHIEF, SUPPLY PLANNING BRANCH, SUPPLY DIVISION, OSG; NEPHTUNE FOGELBERG, CHIEF, FISCAL OFFICE, OSG; MAJ. GEN. G. H. DECKER, CHIEF, BUDGET DIVISION, OCA; LT. COL. J. H. TRENHOLM, CHIEF, BUDGET AND STATISTICAL ANALYSIS, OFFICE, SUPPLY DIVISION, OSG; AND BRIG. GEN. R. S. MOORE, SPECIAL ASSISTANT TO ASSISTANT SECRETARY OF DEFENSE, COMPTROLLER

AMOUNT REQUESTED

Senator O'MAHONEY. I understand General Robinson is to be the spokesman.

You may proceed, sir.

General ROBINSON. I have a prepared statement, sir, which I would like to read, if I may.

Senator O'MAHONEY. Proceed, General.

General ROBINSON. Mr. Chairman, and members of the committee, the Army Medical Service is requesting $272,059,000 under the appropriation "Medical and Hospital Department Army," for fiscal year 1952. Of this amount, 62.7 percent is for procurement of medical supplies and equipment; 32.2 percent is for operation of recruiting stations, hospitals, procurement office, medical depots, and other professional services; 1.4 percent is for education and training activities, and 3.7 percent is for research and development activities.

BUDGET INCREASE

The estimates for fiscal year 1952 represent an increase of $94,443,158 over the estimates for fiscal year 1951 including the fourth supplemental appropriation. This increase is due primarily to including in the estimates for fiscal year 1952 $100,278,748 for a mobilization reserve stock program of which $95,698,202 represents procurement of a limited number of long lead time and critical items of medical supplies

and equipment, and $4,580,546 represents the cost of handing this procurement program in the procurement office and medical depots.

Since this program represents nearly 40 percent of the total funds requested for fiscal year 1952, it is desirable to emphasize the special needs of the Army Medical Service in time of mobilization.

Under the currently approved mobilization plan the Army will increase in size very rapidly after M-day through induction of selective service personnel and units of the National Guard and Organized Reserve Corps. The Army Medical Service must be prepared to provide medical care for these men from the day of their induction into the active military service.

EXPANSION OF MEDICAL FACILITIES

The funds included in these estimates for mobilization reserve procurement are in part intended to provide equipment for the additional medical facilities which will be required to support this build-up in Army strength.

Also contributing to the rapid expansion of the zone of the interior hospital system after M-day is the added patient load of battle casualties evacuated from the combat zones. The general hospital system must be expanded quickly and adequately, from an equipment standpoint, to provide the highly specialized care required for the treatment of these casualties.

Simultaneously with the expansion of the zone of interior hospital system, the Army Medical Service is faced with the immediate task of assembling and shipping to oversea destinations, hundreds of tactical hospitals of varying sizes, ranging from 60-bed mobile Army surgical hospitals for use in the combat zone, to 1,000-bed general hospitals for use in the communications zone.

These hospital assemblies represent the medical equipment requirements of Organized Reserve Corps units called to duty.

To give an idea of the size and complexity of these hospital assemblies, a 1,000-bed general hospital assembly contains 2,825 line items of medical supplies and equipment weighing 340,000 pounds and packed in 3,424 packages. It is obvious that the bulk of the equipment to be included in assemblies of this type required for shipment during the first year of mobilization must be on hand very soon after M-day and substantially in advance of the shipping date of the units for which intended, to permit assembling, packing, marking, and movement to the port on schedule.

I have some charts here, Mr. Chairman, which will illustrate this. Colonel Trenholm will point out the pertinent parts.

This chart is intended to portray the impact of mobilization on the supply of medical equipment. With no mobilization the requirements picture for fiscal year 1952 would resemble the lower half of the chart:

1. Equipment in hands of troops, dispensaries, hospitals, and,
2. Normal depot safety levels.

The depot safety level would be maintained and normal issue demand would be met by small monthly receipts from production. Once mobilization is thrust upon us, the picture changes drastically. Requirements for the first year of mobilization increase at a rapid rate.

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I would like to emphasize this feature of the chart, namely, that the broadened industrial base resulting from the procurement programs for fiscal years 1951 and 1952, make it possible to plan on meeting the greater part of the first year's mobilization requirements from production initiated after M-day.

Senator O'MAHONEY. In other words, it would appear from this chart that the mobilization reserve planned for is for 16 months after M-day and it is just the same throughout that period.

General ROBINSON. Colonel Trenholm, do you want to comment on that?

Colonel TRENHOLM. Yes, sir.

This being our requirement line, sir, it is going to be 16 months after M-day before we are going to be able to meet all our demands.

Senator O'MAHONEY. My question was whether I understand the chart correctly when I say that it means to me that the size of the mobilization reserve does not change from beginning to the end of the 16-month period.

Colonel TRENHOLM. That is correct.

Senator O'MAHONEY. In other words, what you get for the mobilization reserve now will be maintained throughout this period and the increased requirements will be supplied by the increasing receipts from production.

Colonel TRENHOLM. That is correct.

Senator O'MAHONEY. What is the significance of the section of the chart in white, above the mobilization reserve line and below the red line?

General ROBINSON. That, Mr. Chairman, is a shortage not provided for in our budget.

In other words, we will still be short that amount of goods for that period of time.

Senator O'MAHONEY. In other words, there would be a shortage from approximately the fourth month until more than the fifteenth before receipts from production were actually caught up.

General ROBINSON. That is correct, sir.

Senator O'MAHONEY. It does not seem to me as though we ought to plan on a shortage.

General ROBINSON. We have included this amount for the mobilization reserve that is indicated on the chart.

Senator O'MAHONEY. But still it leaves a shortage.

General ROBINSON. Yes. We are not meeting our full requirements.

Mr. Fogelberg brings up the point that we have taken a calculated risk in order to hold the request for funds to a minimum.

Even by taking liberal advantage of commercial inventories and receipts from production after M-day there remains a shortage which must be met from reserve stocks if adequate medical care is to be provided. This shortage is due to inescapable time elements involved in large-scale production which limit the amount of equipment which can be quickly obtained from industry. Even with the mobilization reserve there is still a shortage in meeting requirements which represents a calculated risk. This risk continued until M plus 16 months.

PROCUREMENT OF EQUIPMENT

This next chart sets forth the various time elements involved in the procurement and production of 200 X-ray machines, a typical medical item of equipment. The production data was prepared by consultation with representatives of industry and assumes the existence of planned wartime controls, such as the controlled-materials plan.

Approximately 9½ months elapse from the time a procurement instruction is issued by the Army Surgeon General's office until the first month's production is received in depots and available for issue. Of this time only 1 month is attributable to Army paper work, preparation of purchase instructions, negotiation with bidders, and award of contract. The remaining time elements are strictly production and shipment. The longest single time element is the procurement of components, such as meters and bearings, from subcontractors.

Senator O'MAHONEY. This shows the procurement and production of 200 X-ray machines. How many X-ray machines would the Medical Corps have?

General ROBINSON. Colonel Strnad, could you answer that question?

Colonel STRNAD. I cannot give you the exact figure right off, sir.

Senator O'MAHONEY. Approximately.

General ROBINSON. In our depot stocks we have relatively few. I imagine we would have not more than 10 in our depot stocks. All that we have are in operation.

Senator O'MAHONEY. How many do you have in operation?

Colonel STRNAD. We have an estimated total of 864 of various sizes of X-ray units in our hospitals, dispensaries, and other medical establishments.

Senator O'MAHONEY. What is the significance of the chart showing the production and procurement of 200? Is that your reserve?

Colonel STRNAD. That was selected as an arbitrary quantity, a batch production. It is merely a typical production in quantity.

Senator O'MAHONEY. Is it just merely to show the time taken to produce?

Colonel STRNAD. Yes, sir.

General ROBINSON. Colonel Trenholm.

Colonel TRENHOLM. It shows that it takes 1 month from the time of M-day until we have placed a contract with industry, that is, determined our requirements, negotiated a contract, and awarded the contract.

From then on it is up to the contractor. After he receives the contract, he has to take care of the completion of engineering of his own manufactured parts, the completion of his purchased parts, and his final release of drawings and test specifications.

Those three areas are going on simultaneously. Those are the first things the manufacturer does.

PROCUREMENT PROCEDURE

Senator O'MAHONEY. Those three items, together would take 3 months; the first item, engineering completion of manufactured parts, takes 1 month; the engineering completion of purchased parts 2

months; and finally the release of drawings, test specifications, et cetera, will not be made until 3 months have elapsed.

Colonel TRENHOLM. That is correct. And they are going on simultaneously at that point.

Senator CHAVEZ, That is 3 months from the time the contract is given; is that correct?

Colonel TRENHOLM. Yes, sir.

Senator CHAVEZ. Four months altogether from the time it is started.

Colonel TRENHOLM. Yes, sir.

From there the production planning goes on simultaneously during this period. Before he has released the final drawings he is performing the production-space planning. That is also during this period.

He is computing his raw-material requirements, or his bills of material, and he is constructing his tools for the manufacture.

Senator O'MAHONEY. There are five operations going on in the third month.

Colonel TRENHOLM. Yes, sir.

From that point, then, he starts his raw-material procurement, which you will notice follows right after he has computed his requirements.

At the same time, he starts subcontracting for his component parts.

Senator O'MAHONEY. In the last month of the preparation for the final release of drawings, tests, specifications, et cetera, and tool construction, the contractor begins to procure raw material and purchase parts.

Colonel TRENHOLM. Yes, sir. During that last month he starts his raw-material procurement and his component-parts procurement. Then he starts his fabrication as soon as he has received his raw materials and some of his purchased parts from his subcontractors.

Senator O'MAHONEY. So that he does not begin fabrication of the first lot until 6 months after the determination of requirements.

Colonel TRENHOLM. Yes, sir; 5 months after the award of contract he starts his fabrication.

Senator O'MAHONEY. That would be 6, because that is the seventh month.

Colonel TRENHOLM. That is right; it is 6.

His assembly and final inspection come as soon as he has completed his fabrication and received his purchase parts. He takes 1 month for assembly of the first lot, which generally is a batch of 50 or 100 or 150.

Senator O'MAHONEY. Would not this chart be equally valid for 500 units as well as 200?

Colonel TRENHOLM. I don't believe we have the manufacturing capacity to produce 500. If the manufacturing capacity were available, we would not require such a capacity at this time. I don't believe that a manufacturing capacity for 500 X-ray machines exists in the country today.

Senator O'MAHONEY. Then you are saying it is not necessary to increase the facilities.

Colonel TRENHOLM. No, sir.

Senator O'MAHONEY. And by turning out 200 machines in 10 months after awarding the contract you can meet your build-up.

Colonel TRENHOLM. Yes, we can meet our phased build-up. It is in the first 9½ months that we run into difficulty.

Senator O'MAHONEY. But if you have 800 in use now, how many will you need in all-out operation?

General ROBINSON. Colonel Strnad, can you answer that?

Colonel STRNAD. On this particular machine, I will have to give an estimate because I don't have a complete period computed. It will run into a couple of thousand at least for, say, the first 24 or 36 months.

Senator O'MAHONEY. Have you made arrangements for that? Does this budget show any preparation for that?

Colonel STRNAD. This budget, sir, provides the quantities that are necessary to get over this initial hump after M-day. We anticipate that after mobilization comes and we start all-out mobilization production, that at the end of 9 to 12 months industry will be producing and catching up with our requirements for mobilization.

This is merely to give us an opportunity to get over the initial hump, sir.

Colonel TRENHOLM. The first to the ninth month.

Senator O'MAHONEY. Thank you. That is clear.

General ROBINSON. This chart, of course, illustrates that regardless of the extent to which industry is encouraged to expand, there will always be a period after M-day during which requirements can only be met from reserve stocks on hand. The funds requested in these estimates, therefore, are intended to partially bridge this gap after M-day until mobilization production catches up with requirements.

MOBILIZATION RESERVE

The Army Medical Service takes a realistic and conservative approach to the problem of mobilization-reserve procurement and avoids the stockage of items which experience indicates can be quickly produced by industry. The program contemplates procurement of only 802, out of the approximately 8,000 end-items stocked and issued by Army medical depots. This reserve is absolutely essential in support of the mobilization plan.

The estimate for fiscal year 1951 provided $11,193,646 for the initiation of the mobilization-reserve-stock program. Therefore, this program accounts for $89,085,102 of the $94,443,158 increase in fund requirements for fiscal year 1952 as compared with fiscal year 1951.

The balance of the increase of $5,358,056 results from changes in a multitude of items; however, the principal activities responsible for this increase may be briefly summarized as follows:

PATIENT CARE

First we have increased normal patient load in the amount of $35,404, 414.

The estimates for fiscal year 1952 request $78,349,727 for normal patient care—Korean battle casualties excluded—as compared with $42,945,313 for fiscal year 1951. The increase of $35,404,414 consists of $26,630,564 for the care of 11,664 additional bed patients on the average and $8,773,850 for out-patient care for an average of 41 percent more military personnel.

Senator O'MAHONEY. That is pure speculation; is it not?

General ROBINSON. It really is statistical. We really have statistics on it, and it is very accurate.

Senator O'MAHONEY. What type of statistics would you have to reach a figure of 11,664 additional bed patients? When you get down to the last digit you are really narrowing it down.

General ROBINSON. Mr. Fogelberg, can you comment on that?

Mr. FOGELBERG. We determine by analysis of troop strength and the distribution of the troop strength in the zone of interior and overseas what our patient load will be, based on our morbidity experience for the last 12-month period.

We can tell from our admission rates per thousand troops what our patient load should be for a given strength in a given location.

Senator O'MAHONEY. I can understand how you might well compute that on the basis of illness, but how you could compute it on the basis of battle casualties, I do not know.

Mr. FOGELBERG. When we had to prepare an estimate of what the Korean casualties would be initially for the fiscal year 1951, we had to go back to our World War II experience for our theaters of combat. We took that experience and adjust it to reflect what the experience should be in Korea.

So we took World War II experience and estimated that our casualties, that is, the hospital-admission rate, would be approximately 50 percent of our World War II experience. Experience to date has proven it to be a fairly close estimate.

Before this budget was recut for submission to Congress we adjusted all of our patient-load figures in the light of actual experience at that time.

Senator O'MAHONEY. Your statistical estimates, then, of casualties to arrive from the Korean War have worked out very well; have they?

Mr. FOGELBERG. Very well, sir.

Senator O'MAHONEY. Proceed, General.

RESEARCH AND DEVELOPMENT

General ROBINSON. The second item is for increased research and development, in the amount of $3,260,000. The increase in research and development funds is required to place greater emphasis on the clinical aspects of handling large numbers of flame and flash burns; preservation of circulation in extremities in acute arterial injuries; control of healing and infections in battle wounds, and to provide for extension of selected research contracts beyond fiscal year 1952 on long-term studies.

It is understood that the details of the research and development program will be dealt with in a separate hearing.

Third is the decrease in Korean operations, amounting to $25,962,574.

The estimates for fiscal year 1952 do not include requirements for continuation of Korean operations after June 30, 1951, except for the care of patients carried over from fiscal year 1951 as a result of previous hostilities. Accordingly, the fiscal year 1952 estimates request $13,866,530 for Korean operations as compared with $39,829,104 for fiscal year 1951.

Senator CHAVEZ. Why is that? How did you arrive at the statement that the estimates for the fiscal year 1952 do not include requirements for continuation of Korean operations after June 30, 1951?

General ROBINSON. That, of course, was in our over-all instructions on the preparation of the 1952 budget.

Mr. FOGELBERG. That is right, sir. It was one of the basic assumptions on which the budget was prepared, sir.

Senator O'MAHONEY. Senator, this is the only change from the rule which has been followed throughout the presentation of the budget to date. Korean expenditure of material of all kinds has been excluded.

But here for the first time they are asking for money to take care of patients who have become patients before the 30th of June. They are going to come up with some sort of estimate for the later patients.

Senator CHAVEZ. Thank you.

BUDGET INCREASE

General ROBINSON. The fourth item is a decrease in all other activities, amounting to $7,343,784. That makes a net increase of $5,358,056.

ARMY MEDICAL SERVICE FUND

This is a brief summary of the Army Medical Service fund requirements for the fiscal year 1952.

A detailed breakdown and justification of these funds is contained in the estimates.

Senator O'MAHONEY. It appears that the increase over 1951, which is $155,233,000, as compared with $272,059,000 for 1952, is due primarily to the procurement of the mobilization reserve stock, which you say consists of a limited number of long lead time and critical items.

General ROBINSON. That is correct.

Senator O'MAHONEY. In other words, for the reserve stock you are not asking money now to purchase those medical items or equipment, whatever it might be, which can readily be obtained from the commercial production.

General ROBINSON. That is correct.

Senator O'MAHONEY. But you are asking money only for that material which is not currently being produced and which will take a long time to deliver.

General ROBINSON. That is correct. And that is about 10 percent of our total stocked end items.

Senator O'MAHONEY. The rest of the expenditure, namely, the $155,233,000 which you had in 1951, and the approximately $4 million additional here will be expended on what purposes?

General ROBINSON. Can you answer that, Mr. Fogelberg?

Mr. FOGELBERG. Mr. Chairman, may I make a suggestion, sir?

Senator O'MAHONEY. Yes.

Mr. FOGELBERG. The book shows that our appropriation for fiscal year 1951 was $155,233,000, but to compare 1951 with 1952 we have to look at the total direct obligations, sir. That is on page 4 of the estimates.

For fiscal year 1951 it is $177,615,842, which is a comparable figure to the $272 million for fiscal year 1952.

The reason for that, sir, is that we received some money in fiscal year 1951 by appropriation transfer for industrial mobilization and research and development and also the fourth supplemental, sir, was not in the $155 million figure which you quoted.

Senator O'MAHONEY. The general breakdown is to be found on page 5, is it not?

Mr. FOGELBERG. Yes, sir.

Senator O'MAHONEY. Listed there are procurement of standard supplies, nonstandard supplies, operation of recruiting stations, medical centers, station hospitals, medical professional services of all types, operation of procurement office and requirements and stock-control branch, operation of depots.

You have a separate system of depots do you not, from the Quartermaster General?

General ROBINSON. Yes, sir. We have a separate system of depots, with the exception that the Medical Service is occupying sections in some of the large quartermaster depots.

But we do have three separate branch depots.

Senator O'MAHONEY. Do you have your own control system?

General ROBINSON. Yes, sir. But, of course, it is part of the Army supply system. We work in conjunction with the Army supply system as a whole.

Senator O'MAHONEY. Is it any different in its essentials as a control system from that of the Quartermaster General? Do you maintain the same system of supervising your inventory and guarding against loss and waste?

General ROBINSON. Yes. We have exactly the same system as far as that is concerned. The only differences in our system are the technical differences.

LANGUAGE CHANGES

Senator O'MAHONEY. I notice that there was some change of language here.

General Decker, you said earlier that you intended to discuss this language change all at one time. May I ask you whether you had any trouble in the House about that? Did the House accept all these language changes?

General DECKER. We had no difficulty whatsoever with the House. As far as I know, all of the proposed language changes were in the House report.

Senator O'MAHONEY. Have you examined the bill as it was reported?

General DECKER. I have not examined it that closely to determine that it was all there, but I think generally it is.

Senator O'MAHONEY. It might be well for you to do that before you present the language changes, because that will have quite an effect on the budget presentation.

General DECKER. Yes, sir. My representative who presents the language changes will be prepared to discuss in detail what the House did to our proposal.

OPERATION OF MEDICAL FACILITIES

Senator O'MAHONEY. We have had this research and development discussed already, and unless you have some specific reason for making some additional comment, General, I shall only ask you for a general statement on the operational programs, the 400 programs.

That is on page 765.

The estimate for that is $87,705,101 for 1952, as compared with $68,951,366 for 1951. That does not seem to be very much of an increase, but I take it that it is explained on the fact that this is only a partial preparation for all-out operation.

General ROBINSON. That is correct, sir.

With regard to 412 there, the operation of recruiting stations, there is a decrease, you will note. The reason for that decrease is the reduction of 793,345 gains to the Army and Air Force, and a reduction of 23 cents in the cost per gain. You count one man as one gain.

Senator O'MAHONEY. If it were an Irishman, it might be 10 gains.

General ROBINSON. In the operation of medical centers and general hospitals, there is an increase due to an increase in the Army average patient load of 1,758, offset by a reduction in staffing ratio of approximately 5 percent.

Then in the operation of station hospitals, 415, there is an increase of $17 million. This is due to an increase in the average Army patient load of 6,205, costing $8,904,497.

In addition provision is made for staffing proportionately higher with civilians than with military for the increased patient load, requiring an average of 3,005 more civilians, costing $8,553,748.

Senator O'MAHONEY. On page 767 you show an increase in the total number of permanent positions from 25,746 to 31,101. What is the basis of this estimate?

Mr. FOGELBERG. That is due to two things, sir. First, it is due to an increase in the average patient load anticipated in fiscal year 1952 as compared with fiscal year 1951, of approximately 8,000.

Secondly, it is due to staffing the station hospitals proportionately heavier with civilians than with military for this expanding volume.

The reason for staffing proportionately heavier with civilians is to free the military for military duties. It is Department of the Army policy to utilize civilians in lieu of military where they can, so that the military can be available for combat training.

Those are the reasons for the increase, sir.

Senator O'MAHONEY. Thank you, sir.

STOCKPILING OF BLOOD PLASMA AND SUBSTITUTES

On page 10 is a list of supplies and materials by category. I note you have $13,660,000 for the stockpiling of blood plasma and substitutes. What is the present status of the stockpiling of blood plasma?

Colonel TRENHOLM. Of the goal of 1,200,000 by the end of 1952, that is the 1951 and 1952 program, we have in our depots somewhat less than 200,000 finished units of blood plasma at the moment.

I don't know the exact quantity that we have in the hands of processors, but we have considerable in the hands of processors that have now been processed from whole blood into plasma, sir.

Senator O'MAHONY. That is a rather large deficit, is it not?

Colonel TRENHOLM. Yes, sir. The program got started late in 1951, and it is behind schedule now.

Senator O'MAHONEY. Why.

Colonel TRENHOLM. The Red Cross have not been able to keep up with their original estimates.

The Secretary of Defense has just issued, within the last 48 hours or so, an order authorizing the collection by the military on military reservations to help reduce this deficit.

Senator O'MAHONEY. What about the preservation of plasma once you have collected it? How long does it stand up in usable form?

Colonel TRENHOLM. The National Institutes of Health have placed a tentative 5 year life on it, at which time it can be extended by treatment and repackaging for another 5 years.

Senator O'MAHONEY. What is your actual experience?

Colonel TRENHOLM. We used some of it during and after the last war to the extent of 7 years.

Senator O'MAHONEY. I have been told—I do not know on how good authority—that medical authorities have suffered quite a little disappointment because of deterioration of blood plasma. Is that true?

General ROBINSON. I think probably what you may refer to is the fact that certain new treatments, like radiation and those things, were not given to the original plasma made during World War II. Those processes have been developed since that time in an endeavor to further prolong the life of plasma. I think it is quite true that some of the early plasma that was collected and made during World War II did not last as long as might have been expected.

Senator O'MAHONEY. What steps do you take to test it and make sure that the plasma, when used, is in good condition?

General ROBINSON. That is all done, I think, under the auspices of the National Institute of Health, which is the only place in the country that is able to do that.

Senator O'MAHONEY. I am talking about the Medical Corps of the Army. You have the plasma and you administer it.

General ROBINSON. I know. We have them take samples of lots and have them test it.

Senator O'MAHONEY. I am talking about the actual administration from stock. You issue blood plasma and it goes to the field, and the occasion arises for the use of the plasma. Do you make any tests of it after it reaches the field?

Colonel TRENHOLM. Each lot is dated, and if it is used before that date there is no question about it. That has all been checked by the best authorities we have. We do not allow it to be used after that date until it is rechecked.

Senator CHAVEZ. But when you do use it on a patient, on a wounded soldier, do you afterward make a test to find out what the results were, whether it was effective?

General ROBINSON. That, of course, is clinical, and is known, if anything ever shows up that could be attributed to it.

Senator CHAVEZ. Have you any case history to cite from the Korean front of anything like that?

General ROBINSON. None whatever.

Senator O'MAHONEY. And you are satisfied, are you, that the blood plasma which has been used in Korea has been good?

General ROBINSON. Yes, sir.

Senator O'MAHONEY. I notice the word "substitutes" here in this description category, "Stockpiling of blood plasma and substitutes." What substitutes do you have?

General ROBINSON. There are a number of blood substitutes that are being developed. You have undoubtedly heard of dextran. I believe it was first developed by the Swedes. That is also being produced in limited quantities now in this country, and we are still in the testing stage.

Actually, these materials may take the place, or partially take the place of blood plasma in the future. However, it is still somewhat in the development stage and we won't purchase any great quantities of those until they are better known.

Senator O'MAHONEY. Has it been used successfully?

General ROBINSON. Yes, sir.

Senator O'MAHONEY. What quantity of it do you have on hand now?

Colonel TRENHOLM. We don't have it. The first American company is now getting into production on dextran, and they have just been awarded a contract, and we will get production in a very short time.

Senator O'MAHONEY. How much is provided for in that contract?

Colonel TRENHOLM. One hundred thousand units of dextran.

Senator O'MAHONEY. What is a unit?

Colonel TRENHOLM. It is equal to a unit of blood plasma.

Senator O'MAHONEY. How much is a unit of blood plasma?

Colonel TRENHOLM. Five hundred cc.

Senator O'MAHONEY. General Robinson, I think that your statement and the facts set forth in the justification here are sufficient. Unless there is something else you want to add, we will excuse you with our thanks.

General ROBINSON. Thank you very much, sir.

Senator O'MAHONEY. We will now hear from the Signal Service of the Army.

SIGNAL SERVICE OF THE ARMY

STATEMENTS OF MAJ. GEN. K. B. LAWTON, DEPUTY CHIEF, SIGNAL OFFICER; COL. WILLIAM P. PENCE, COMPTROLLER, SIGNAL CORPS; MAJ. GEN. G. H. DECKER, CHIEF, BUDGET DIVISION, OCA; MILLARD C. WEST, ASSISTANT COMPTROLLER, SIGNAL CORPS; AND BRIG. GEN. R. S. MOORE, SPECIAL ASSISTANT TO ASSISTANT SECRETARY OF DEFENSE, COMPTROLLER

BUDGET SUMMARY

Senator O'MAHONEY. You may proceed, General.

General LAWTON. Mr. Chairman, I would rather talk from the chart. I have a prepared statement which I will enter into the record, and then I would like to give you an over-all picture about where these funds go.

Senator O'MAHONEY. That will be quite satisfactory.

(The statement referred to is as follows:)

GENERAL STATEMENT OF THE DEPUTY CHIEF SIGNAL OFFICER

1. Mr. Chairman and gentlemen, the mission of the Signal Corps is to provide signal communication and photographic service for the Army.

2. This estimate includes funds not only for the operations directly under the supervision of my office but also funds required by the Army areas, overseas commands, special field activities, and special special field activities.

3. I have prepared a chart showing the purposes for which the funds are required, and indicate the comparative requirements between fiscal years 1951 and 1952. Indicated in white with a blue border are the revised estimates for fiscal year 1951 amounting to $1,176,077,160. Shown in blue cross hatch are funds in the amount of $1,243,707,000 required for fiscal year 1952, or an increase of approximately $67,000,000.

MAJOR PROCUREMENT

4. The first bar indicates that funds in the amount of $806.1 million are needed for major procurement of combat-type equipment. The method of computing this requirement has been furnished you in your discussion with the Chief of Staff and the Assistant Chief of Staff, G–4.

SUPPLIES AND MATERIALS

5. My next bar indicates that funds in the amount of $118 million are required for supplies and materials to operate and maintain combat-type equipment. Of the $118 million required for fiscal year 1952, $19 million will be required to initiate the procurement of long-lead-time-type components and minor items that will be needed in the event of any emergency. Eleven million dollars are required for the purchase of expendable supplies such as dry batteries which will be required to support the Korean operations for 3 months after June 30, 1951. The balance is required for current operations of the active Army during that year.

ISSUE AND REPAIR SYSTEM

6. For fiscal year 1952, $92.4 million will be required for the issue and repair system. In order to place in the hands of troops communication equipment and supplies required, the Signal Corps operates an extensive issue and repair system. The major increases in this category are the expansion of the depot system to store and issue new equipment being received from procurement, expansion of the maintenance program to meet the requirements of the active Army, and the establishment and operation for a full year of new field maintenance shops at posts, camps, and stations.

COMMUNICATIONS FOR THE ARMY

7. Next we come to funds required for the construction, rehabilitation, operation, and maintenance of Government-owned radio systems and commercial communications. The over-all requirements under this category are slightly less than those in fiscal year 1951.

TRAINING FILMS AND PHOTOGRAPHY

8. The next bar covers funds for photographic service for the Army including the production and distribution of training films and photographic activities of the active Army. A slight increase under this heading is required to pay a full year's salary to personnel hired during fiscal year 1951.

TRAINING

9. Under training the only major change is in the establishment of a new Signal Corps replacement training center to meet the requirements of the Army for trained communication specialists.

RESEARCH AND DEVELOPMENT

10. Requirements for research and development remain at approximately the same level as in fiscal year 1951.

INDUSTRIAL MOBILIZATION

11. The increase under industrial mobilization reflects acceleration of the program to provide contractors capable of manufacturing the miniaturized and improved components required in new communication equipment.

SPECIAL FIELD ACTIVITIES
SPECIAL SPECIAL FIELD ACTIVITIES

12. The last two bars cover requirements for special field activities and special special field activities.

PERSONNEL

13. In the lower portion of this chart there is indicated the man-years included in the fiscal year 1951 and 1952 budgets in the various fields. The total number of man-years required in fiscal year 1952 is 48,659.6, an increase of 15,151.1. Of this total, approximately one-half is attributable to the payment of a full year's salary to personnel hired in fiscal year 1951, and the balance is required to meet new requirements that will arise in fiscal year 1952. The areas in which these increases occur are in the personnel to handle the major procurement program, personnel to receive and repair equipment in the branch depots, and in special special field activities.

14. To summarize, gentlemen, our total estimates for fiscal year 1952 included in this request amount to $1,243,707,000. Of this total, approximately two-thirds are required for the major procurement of combat-type equipment. There are only $11 million included for use in the Korean operations after June 30, 1951. No provision is made to cover the planned pay-as-you-go policies in Germany and Japan.

This concludes my general presentation. If there are no questions, I would suggest that we turn to project 110 on page 617.

MAJOR PROCUREMENT

General LAWTON. Last year, fiscal year 1951, the Signal Corps had $1.1 billion. This year we are asking for $1.2 billion. So with this chart I would like to show you in general where that $1.2 billion goes.

The cross-hatch bar shows you fiscal year 1952, and the other column gives you a comparison with what we did with last year's funds.

Our major procurement consists of equipment for tactical organizations in the field, such as radio, telephone equipment, the wire, radio relay, carrier equipment, and electronics equipment in general for the tactical troops and none of the fixed stations. We will talk about that later.

Eight hundred and six million is for that equipment, compared to the amount of seven hundred and fifty-four million we had last year.

In general, it means continuing the production lines of the items of equipment which we started in 1951.

Senator O'MAHONEY. Has your 1951 appropriation all been obligated?

General LAWTON. Yes, sir; it has, except about $4,000,000.

SUPPLIES AND EQUIPMENT

The next column shows supplies and materials. This means replacement items to keep the end items of equipment in the field in operation, like dry batteries, cords, vacuum tubes, and repair parts for the major items. There is a slight drop in 1952.

Senator CHAVEZ. That is due to what?

Colonel PENCE. End of the Korean operation.

General LAWTON. In 1951 we had operations in Korea, and, as you know, in 1952 we have included no funds to operate in Korea.

Senator CHAVEZ. Mr. Chairman, I still cannot get it through my mind. Do I understand that we are appropriating a separate item?

Senator O'MAHONEY. This appropriation you can call a preparedness appropriation. They are coming along later with their estimates of what will be needed to supply the deficiency occasioned by the expenditures in Korea.

I have told General Decker that the committee, before closing the hearing, would like to have these estimates presented to us so that when we go on the floor we will be able to give the Senate a picture of the whole thing.

Proceed, General.

MAINTENANCE OF DEPOTS

General LAWTON. The next bar shows $92 million for issue and repair. The issue means the operation of our four branch depots: one in Baltimore, Md.; one in Decatur, Ill.; one in Lexington, Ky., and one in Sacramento, Calif.; into which this equipment is received and issued.

The various parts are put together, referred to as married together, and then issued out to the troops, as well as the equipment which is now in there, of items left over from World War II, which are being repaired and issued to troops, thereby reducing the purchase of new equipment.

Communications for the Army we required $72,500,000. We operate the post telephone systems on all the camps in the United States and overseas. Then we operate a vast radio net to our overseas stations. This includes the equipment and personnel for that system, supplying communication service for the entire Army.

Senator O'MAHONEY. Going back to the issue and repair system, that amounts to $92,400,000.

General LAWTON. Yes, sir.

Senator O'MAHONEY. How much material on hand is rejected as unfit for repair?

General LAWTON. We have very little of that in our system today. It has been gone over during the past 6 years. I would say we haven't more than 4 or 5 percent left in our system that is unfit for repair. It is in general all suitable for repair.

I might say that, in general, we can repair what we have in our depots for around 15 cents on a dollar for labor and spare parts.

Senator O'MAHONEY. This represents, then, a substantial saving on your budget, does it?

General LAWTON. Yes, sir. One hundred and twenty-one million dollars is scheduled to be repaired in our shops this year, to be issued to troops, which is not in this figure for major procurement.

Senator O'MAHONEY. Does this $92.4 million represent the cost of the repair, or the value of the material?

General LAWTON. The cost of the repair, and receipt and issue, sir. We have civilian personnel working in the shops to make the repairs and handle the stock.

Senator O'MAHONEY. Can you give us an idea of the replacement cost of the material which is repaired and put back into use?

General LAWTON. It is anticipated that $121 million worth (procurement cost) of communications equipment will be repaired in the four depot repair shops during fiscal year 1952.

TRAINING FILMS AND PHOTOGRAPHY

General LAWTON. As to our training films and photography, we make the training films for the entire Army. A portion of this is for the actual production of training films. We make 225 reels per year. Then we maintain the film libraries for post camps and stations.

Senator O'MAHONEY. You are just the manufacturer carrying out orders; is that it?

General LAWTON. That is right, sir.

Senator O'MAHONEY. You exercise no judgment as to the value of these films, do you?

General LAWTON. Yes, sir; we do, because some people can get overambitious about ordering training films. We have a section we call the utilization section, and from our statistics coming in from the field, if we find a certain film is not being used very often, we then watch that service to see that they don't ask us to make more films which may not be used too often.

Senator O'MAHONEY. Congratulations.

General LAWTON. And it is really effective.

Then in our libraries, for instance, the system is so set up that if one library wants two more prints because they have more troops there, instead of ordering two more from our own manufacturer we look over the list and find out where we can get two of these from another library where the military personnel has shifted and they are not using them very often.

SCHOOL TRAINING PROGRAM

For training, $13 million, this is to take care of the civilian employment and some few odd dollars for training aides at three of our training schools.

At Fort Monmouth, N. J., we have a school for about 18 different courses and we have 5,000 students capacity.

Senator CHAVEZ. How do you get them?

General LAWTON. From the draft, selected from their educational qualifications. At a certain level we can take them into the Signal Corps school and be sure we can graduate them. Those tests are so accurate now that we won't fail more than about 3 percent of the students for a particular course.

Senator CHAVEZ. How long does a course last?

General LAWTON. They vary. A high-speed radio-operator course will be, say 25 weeks; a teletypewriter mechanic, say, 22 weeks; radio repairman, 24 weeks. The longest course is a radar repairman, 33 weeks.

Senator CHAVEZ. General, you stated heretofore that training consisted of 18 different courses at Fort Monmouth.

General LAWTON. Yes, sir.

Senator CHAVEZ. Will you have your staff identify them for the record and the length of time for each course?

General LAWTON. Yes, sir. We have about 26 courses in all.

(The material requested is as follows:)

Enlisted courses

	Length in weeks
The Signal School, Fort Monmouth, N. J.:	
Motion-picture photography	11
Wire electronics repair	19
Single side band radio repair	11
Microwave radio repair	26
Telephone and telegraph equipment repair	14
Radio teletypewriter repair	22
Repeater and carrier installation and maintenance	20
Camera repair	11
Manual central office maintenance	16
Dial central office maintenance	18
Still photo and photo laboratory	12
Sound projector repair	10
Sound recording	10
Teletypewriter equipment maintenance	18
Field radio repair	24
Fixed station radio repair	20
High-speed radio operation	25
Radar repair	33
Southeastern Signal School, Camp Gordon, Ga.:	
Radio teletypewriter repair [1]	22
Cable splicing	13
Electrical instrument repair	12
Repeater and carrier installation and maintenance [1]	20
Manual central office maintenance [1]	16
Power equipment maintenance	11
Teletypewriter equipment maintenance [1]	18
Field radio repair [1]	24
High-speed radio operation [1]	25
Cryptography	10
New signal training center:	
Teletype operator	18
Pole line construction	18
Signal message center	18
Central office telephone switchboard operator	18

[1] Same course conducted at Fort Monmouth.

General LAWTON. At Camp Gordon, Ga., we have another school of 7,000-man capacity and we are opening up another one in San Luis Obispo, in California for 3,000.

So we will have a student body of 15,000 students in electronics.

Most of those are Signal Corps men, although we train men for the Infantry and Artillery, so that they go to their schools as instructors. So this training is uniform throughout the Army.

Then we have a few marines, Coast Guard, Navy, Air Force, and 40 or 50 students from foreign countries.

Our research and development, I think you have already had a hearing, is about $48 million for this year for the Signal Corps.

INDUSTRIAL MOBILIZATION

Industrial mobilization is $12 million. It is increased about $3 million.

The purpose of industrial mobilization going up is that we have gone to the small components, like the small tubes, resistors, condensers, and so forth, and we want to get enough spread of sources of manufacturers so that for an all-out war they can give us a sufficient

quantity of these items. So we want to get a few more companies to take the educational order and just get the know-how for the present time.

Senator O'MAHONEY. What is your definition of industrial mobilization.

General LAWTON. It is to take a company which has not made an item, and get them to turn out an order, let us say 100, so that they will get their foreman and some of their key personnel, actually familiar with putting this through, step by step, in their factory, and giving us 100, and then stop production.

If there is no war, and we do not need any more, that is one thing. If war breaks, those people know how and can immediately go into production.

Senator O'MAHONEY. That is a program for training industry to produce the items that you need in an all-out war?

General LAWTON. Yes, sir; and we figure we will save about 12 months lead time by getting them to do it now, slowly, when they have time, and not waiting until D-day and then start in on it.

(Discussion off the record.)

General LAWTON. So in general, the bulk of this $1.2 billion is to be spent on buying new equipment, in general continuing existing lines, getting it into the depot and out, repairing what we have there, and for the remainder is more or less continuing what we have done in fiscal year 1951.

I know you are always interested in civilian personnel; in 1951, we had 33,000 man-years.

Now, in 1952, we have to go up about 15,000 more to 48,000 man-years.

The reason for this increase here is twofold. In 1951, we did not hire a lot of these people until the middle of the year, so we only paid them one-half year's salary.

In 1952, they are already on our payroll and we need a year's salary for them. Then we are going to increase some positions up and above what we have now. But, in general, we used 2,700 in this procurement and inspection in 1951.

Our contracts for this equipment, as you remember, were not actually let until just a few months ago, so the items are not coming out yet. We have not had much to inspect. But in 1952, when these items start rolling out we have to have many more inspectors in the plants to inspect the equipment. This increase of 3,700 man-years therefore, is due to that. That is the big increase.

Senator O'MAHONEY. How many different items would you procure?

General LAWTON. There are 244, sir, in this big column on the chart.

Senator O'MAHONEY. And they range from the smallest to the largest?

General LAWTON. From a flashlight at $1.50 to a radar set which is $130,000.

Senator O'MAHONEY. You have nothing to do with the manufacture of the radar that goes into an aircraft?

General LAWTON. No, sir; that is all Air Force.

Senator O'MAHONEY. This radar set works in what manner?

General LAWTON. Let me have another chart here.

(Discussion off the record.)

Senator O'MAHONEY. Could you tell me if the equipment that is being purchased by the Signal Corps is being purchased at a price which actually represents its true value to the military at the present time?

General LAWTON. We can go back 3 years ago when some of these items came out of the laboratory, and were sent to the field forces, usually at Fort Bragg, where they have a regular Army establishment, and would not have the Signal Corps. They test the equipment for the artillery and the infantry and the armor.

They have some people who, we think, carry sledge hammers in their pockets, and they give it a real test, physically as well as electronically.

Senator O'MAHONEY. Have they destroyed some of your ideas with those sledge hammers?

General LAWTON. Yes, sir; they do. Sometimes there will be 10 changes that they require. They recommend the changes and send them back to the laboratory, and that goes on until the board says "That is it."

We have had some of those items approved and waiting for money until 1951. We were all ready to go into production but we never had enough money before 1951.

Senator O'MAHONEY. The point is, then, that the items for which you are planning to spend money in 1952 have survived the independent tests of field commands, and General Staff authority, who have no vested interest in the idea, so to speak?

General LAWTON. That is right, sir.

Senator O'MAHONEY. They were not the originators of the idea, and their only purpose is to make sure that it will do the job that needs to be done?

General LAWTON. That is correct, sir. You see, we make it for the infantry, the field artillery, and the tanks, and they have to be satisfied that it serves their purpose, regardless of Signal Corps opinion.

Senator O'MAHONEY. So that the final judgment is not your judgment, but the judgment of a separate, independent authority, within the Army?

General LAWTON. That is right, sir.

Senator O'MAHONEY. Thank you, sir. That is very interesting.

CIVILIAN PERSONNEL

General LAWTON. Just another picture of our civilian personnel. You will find that in procuring, in the operation of our depots, getting it in and out, and getting some of this World War II equipment repaired, a little over 50 percent of our civilian personnel is in that business. For these communications that I mentioned, dollarwise, on the other chart, 16 percent of our civilian personnel, the production of training films and in our libraries consists of 3 percent; the training centers which are at Fort Monmouth, Camp Gordon, and San Luis Obispo, with 15,000 students, has 7 percent of our civilian personnel.

Research and Development has 6.8 percent, and the other activities I mentioned have 13.3.

Senator O'MAHONEY. What are those activities?

General LAWTON. We will leave that off the record.

(Discussion off the record.)

Senator O'MAHONEY. What is the green on that chart?

General LAWTON. This is the procurement of that $806,000,000 and the inspectors.

Senator O'MAHONEY. And that represents what percent?

General LAWTON. 16.9.

Senator O'MAHONEY. And the blue?

General LAWTON. This is the depot operation of the four depots, 28.6 percent.

The red is the men in the repair shop, repairing this $121,000,000 worth of equipment for this year.

Senator O'MAHONEY. How do you determine the number of personnel to be employed?

General LAWTON. We have a little management committee, a group, in the Chief Signal Officer's office, and without that data coming in from the field, when the field commander says, "I want 50 more civilians," we do not know whether we should give it to him or whether we should not. This management group have data that they must send in every month. So, in your budget, you will find that we have asked for 7,600 civilians to operate our Signal Corps branch depots, these four that I mentioned.

The management records show that in 1950 they handled 122,000 tons; in 1951 we are going to handle 200,000 tons. That is, in and out of the depot.

In 1952 we are going to handle 330,000 tons. Now, let us see how accurate these are:

This column here of 200,000 for 1951, was made up last January. I would not let them change it, as we progressed through the Bureau of the Budget and the House, before the 30th of June, because we wanted to see how accurate the estimate would be.

In April, actually, it was 154,000 tons. In May—we have added that up, it was 17,000 and in June they did not hit as much as we expected to, but the total actually is 192,000 tons.

Now, we expected to move about 4,000 tons out of the Baltimore depot, which we did not do. If we add that to the 192, it gives us 196,000 tons. The result is that our management people missed the year's tonnage in and out by only 4,000 tons, and that is 2 percent. So that figure is within 2 percent accurate, and it was made out last January.

Senator O'MAHONEY. How do you account for the $30,000,000 cut the House gave you over-all on the Signal Corps?

General LAWTON. They said that $15,000,000 worth of equipment, they thought, would not be delivered by the manufacturer by next June 30, and they call it "slippage." We are inclined to agree with them.

With this new electronic equipment, the production people are not going to meet their schedules, so we can pay for some of that from the 1953 money, because it will not come out before July and August 1953. So I think we are all right in losing that $15,000,000.

Senator O'MAHONEY. $30,000,000, was it not?

General LAWTON. $15,000,000 more was for personnel.

Senator O'MAHONEY. And the other was for slippage?

General LAWTON. Yes, sir.

Now, on personnel, I have a little different story on that. I would not accept all of it. I will accept part of it. The reason I go into the management figures is to show you the accuracy of this group. I hope you will believe me when, in 1952, our same group says we are going to have 330,000 tons go in and come out of our depots.

In the depot, there is another thing to take into consideration and that is the class C equipment. A small number of persons do minor repairs such as paint and grease, and put it in stock for issue.

Then there is this base maintenance, and this is the major repair where we expect to repair $12,000,000 worth of stock. This is the schedule. Here is the number of people it took in 1951 and the number of people we would like to have in 1952 to do the job.

When we add this up, we find, for receiving and shipping and handling this number of tons, it took 3,290 people. For 1952, for handling 330,000 tons, it will take 5,428 man-years.

Using the same comparison here, we come up to the 997 that we need for reclassification and reconditioning, and for the support of the base maintenance we need 1,055 man-years.

We are going to activate a new depot at Tobyhanna, Pa., which is now being constructed, and which is going to be larger. We need 120 man-years there. That makes the figure that you have in the budget of 7,600 for depot operations. That is why I am so sure that the figures the budget has in it are accurate.

Now, I can give you other charts to show you "Other activities," if you would like to see it.

I do not have anything else to present, because the over-all chart gave you a picture of where this money is going. If there is a particular project that you would like to ask some questions about, I would be glad to show you why we would like to have it.

Senator O'MAHONEY. Frankly, when you tell me that the equipment that you are manufacturing has survived these tests, I am sure that I have no qualifications for judging whether you are properly ordering it or not.

The success of this electronic-development equipment is beyond imagination, as a matter of fact. There is no question about that. The only question here is whether you are ordering too much or too little. But, like the others, you are carrying out the objectives that have been imposed by higher authority.

General LAWTON. That is right. I can assure you we are not ordering too many of any one item, because it all comes within the framework of what G–4 has already told you. We are attempting to equip so many units.

Senator CHAVEZ. Have you another chart there that you could explain in the next 5 minutes?

PRICES OF EQUIPMENT

Senator O'MAHONEY. I was going to ask him this question about price:

What do you find on prices for this new equipment? That is all very much increased, is it not?

These are new items, and you have no basis on which to compare them, but the cost of Signal Corps equipment is much greater than it used to be, is it not?

General LAWTON. Yes, sir; it is—like everything else.

Senator O'MAHONEY. New scientific development costs a lot of money.

General LAWTON. That is correct, sir.

Senator O'MAHONEY. What is this other chart you have?

General LAWTON. This was on repair, on the management-basis business.

Well, let us talk about prices for a second, if you want to. Let us take field wire, as one example, where your Research and Development has saved us money.

The World War II field wire called W–110, cost us about $120 a mile. It had rubber for insulation and a fabric twisted around it to protect the rubber.

The Research and Development has allowed us to use polyethylene in place of the rubber, and then we have nylon, which is extruded on, and can be extruded on much faster as it goes through the machine. That costs us about $95 a mile at the present time. That has been used in Korea for 8 or 9 months, and it is standing up fine over there. It weighs a lot less than the other wire. That is one item that costs us less.

You are correct that other items are costing a bit more. Let us take the handy-talkie that you are familiar with. The budget price in here is about $250 each.

Now, on a pre-Korea contract, we paid $151. But the manfacturers have come in with a claim for hardship, which is authorized by law, which will make that set cost us about $200. But before Korea, he had ordered a great many of his component parts to make this, so that it was the pre-Korea price. The next price will probably be around $250, which is the price in the budget.

Now, to prove that price, we have a similar contract, I mean a contract for the same item, with another person. We have to pay them $290 because it is the first time that they have ever made it. To one man we are paying $290 for it, because it is the first time, and you have to pay him for his retooling and to get started, and to the other fellow you will not have to pay him that second time. So it will average about $250.

Senator CHAVEZ. In the contract for the $290, of course, he is starting, and I can readily see at the start it will cost more. But, when he gets into mass production, have you the authority to renegotiate with him?

General LAWTON. Yes, sir. All of our contracts have renegotiating clauses in them.

That, in general, would explain the pricing of all those 244 items.

ALASKA COMMUNICATIONS SYSTEM

We have about 5 minutes more, and we have the Alaska communications system.

Senator O'MAHONEY. We will have that.

General LAWTON. Are you familiar with that system up there, sir? I do not know whether your committee has heard it.

Senator O'MAHONEY. No; the committee has not heard it.

General LAWTON. I will briefly go over what we are doing. The Signal Corps has been running this communications system since 1901.

At the present time, our headquarters is in Seattle. These lines on this chart represent radio-teletype or radio voice. The blue represents submarine cables. So we tie up into Alaska at 43 different stations, and operate something like the Long Lines Division of the A T & T.

We charge the commercial people up there for sending their messages about the same rates that you do in the United States. Our income is about $1,500,000 per year, which is deposited in the Treasury. It does not come back to us.

Up in Alaska, there are about 300 little settlements, and they have some communications systems of their own which tie into this system, so they can telephone from any one point back to the States, or they can telegraph back here, and get communication with the United States and the outside world, or within Alaska.

Senator CHAVEZ. What about these points on the other side?

General LAWTON. This is the Aleutian chain. It goes out to Adak, where there is now a small station.

Senator O'MAHONEY. What is that line of communication there?

General LAWTON. It will be a teletype radio, sir, back to Seattle, from Adak.

Senator O'MAHONEY. So that is teletype radio, all the way along there, is it?

General LAWTON. Yes, sir; the reason they have two lines is that one is teletype and the other is telephone, so you can telephone from Adak to Seattle and to Washington.

Senator O'MAHONEY. And then the headquarters in Alaska—is that radio?

General LAWTON. That is radio teletype, sir.

Senator O'MAHONEY. That is what I want to know.

General LAWTON. We also provide service to Nome, to Point Barrow, and down the Alcan Highway.

Senator O'MAHONEY. Now, you want this statement in the record, I suppose?

General LAWTON. Yes, sir.

Senator O'MAHONEY. You have covered all this, I believe.

General LAWTON. Yes, sir.

(The statement referred to is as follows:)

STATEMENT OF THE DEPUTY CHIEF SIGNAL OFFICER IN DEFENSE OF THE BUDGET ESTIMATES FOR ALASKA COMMUNICATION SYSTEM, FISCAL YEAR 1952

1. Mr. Chairman and gentleman, before discussing the details of the estimates, I should like to refresh your memory relative to the composition of the Alaska communication system and its mission. Commercial long lines communication companies do not operate in the Territory of Alaska. Long line telegraph, telephone, and related communication services are provided to and from, as well as within, the Territory by the Signal Corps through the Alaska communication system. Service is provided to all key military installations and civilian communities throughout the Territory with connections to the United States and other countries as shown on this chart. Existing land-line telephone circuits are shown in yellow with black symbols and the radio telephone and radio teletypewriter circuits are shown in red with black. The blue indicates the 3,150 nautical miles of submarine cable.

2. In fiscal year 1952, 44 stations will be operated. These stations connect with some 300 Government and privately owned telephone and radio stations located in the smaller towns, Government projects, and canneries. Chart No. 2 shows the manner in which these stations are scattered throughout the Territory. The red dots indicate the main stations of the Alaska communication

system. The black dots show the location of other Government stations served by the Alaska communication system. The small blue dots indicate commercial stations which tie into the Alaska communication system. In operation the Alaska communication system can be likened to the long lines division of the American Telephone & Telegraph Co. with respect to communications in the United States. The system is essentially the arterial communication system of a Territory which has an area of 586,400 square miles and a permanent population of approximately 137,000, an increase of approximately 75 percent since 1945.

DETAILS OF THE MISSION

3. The mission of the Alaska communication system is dual in nature. This dual mission requires that it be so integrated with the military communication facilities in that area that it may effectively serve both the military and civil and avoid any unnecessary duplication of channels of communication. The services that it provides, in addition to the normal telegraph and telephone services, include ship-shore communication for ships at sea, press service to the newspapers, channels for radio broadcast, and telegraphic money orders. Services for the general public are rendered at rates comparable with those charged by other overseas carriers for similar services.

MONEY VALUE OF SERVICE

4. My next chart shows the total value of the services, computed at commercial rates, provided by the Alaska communication system during the fiscal year 1950 including commercial, military, and other Government agencies. The largest user of the system is the military with a total of 65 percent of the total volume. Twenty-two percent of the traffic is commercial; 13 percent is for other Government agencies.

DETAILED BUDGET DISCUSSION

5. The total funds requested in this budget estimate for fiscal year 1952 are $5,576,000; $4,176,000 are for maintenance and operation of the system, and $1,400,000 for the construction of public works.

MAINTENANCE AND OPERATION

6. The $4,176,000 required for the maintenance and operation of the Alaska communication system are shown graphically on my next chart. This is a decrease of $3,012,460 below the estimates for fiscal year 1951 which is due primarily to the completion of the new pole line being constructed to provide additional circuits between Anchorage and Fairbanks. The blue cross-hatched bars on this chart indicate requirements for fiscal year 1952, and the white bars with blue border indicate the estimated obligations for fiscal year 1951.

WIRE CONSTRUCTION

7. The first bar indicates that funds in the amount of $681,175 are required for the construction of telephone, telegraph, and cable systems. Under this heading there is a total of six construction projects. Four of these projects cover necessary funds required in connection with the movement of technical equipment from existing to new buildings being erected with funds included in the fiscal year 1951 appropriation. The fifth project covers the necessary funds to install new power units of sufficient size to carry the load in the Seattle Signal Center during periods of failure of the regular commercial lines. The last project covers funds required for the procurement and installation of teletypewriter switchboards at the five stations of the Alaska communication system. The installation of these switchboards will release teletypewriter machines presently installed for use at other locations and provide a more satisfactory service.

RADIO CONSTRUCTION

8. The next bar indicates that $190,825 will be required for the construction of radio systems. Included in the estimates are funds for four different projects. The first project covers the procurement and installation of very high frequency radio link equipment to provide service between Anchorage and Kodiak. The present equipment installed along this route is unreliable. The next project

covers the procurement and installation of new emergency power equipment at Anchorage of sufficient capacity to handle the load during power failures. The fifth project covers the move of the signal center equipment and receiver station to the new joint Army-Navy communications building being built at Adak. The fourth project covers installation of new very high frequency equipment to provide service between Ketchikan and Annette Island.

MAINTENANCE OF THE SYSTEM

9. The next bar shows that funds in the amount of $664,711 are required for the maintenance of the communication system, an increase of $67,270 over the fiscal year 1951. Of this total, $30,800 are required for the hire of 10 additional repeatermen who will be assigned to existing stations of the Alaska communication system to release personnel for the operation of the four new repeater stations now being activated. The balance of the increase, under "01 Personal services," is required to pay the step increase of graded personnel and the Wage Board increases of ungraded personnel. Under "07, Other contractual services," there is a minor increase of $8,700 required for the repainting of and repairs to antenna towers at Ketchikan, Nome, and Fairbanks.

MAINTENANCE OF BUILDINGS

10. Under maintenance of buildings there is an increase of $11,400 for the maintenance and repair of buildings which reflects increases in the requirements due to new buildings which will have to be maintained and operated in the fiscal year 1952.

OPERATION OF THE SYSTEM

11. The next bar indicates that funds in the amount of $2,517,029 are required for the operation of the system. Under "01, Personal services," there is an increase of $46,755 which is required to pay for a full year's salary of personnel hired in fiscal year 1951, and step increases. Under "04, Communication services" three voice circuits are being leased from Seattle to Edmonton to eliminate the need for paying for each call on a toll basis. Under "05, Rents and utilities" there is an increase of $47,997 which covers the lease of the Davis Building at Anchorage where the long distance switchboard is being installed on an interim basis, and for utilities at new buildings being constructed, and at stations where hours of operation have been increased. Under "08, Supplies and materials," there is an increase of approximately $13,100 which covers gas and oil required incident to the acceleration of the replacement program initiated of poles along the Alcan Highway between Fairbanks and the Canadian border. Under "09, Equipment," there is a net increase of $32,869 for providing furniture for family quarters completed during fiscal year 1952.

FUNDS RECEIVED FROM CIVILIAN TRAFFIC

12. My next chart depicts the trend of funds derived from civilian traffic and deposited monthly in the Treasury of the United States. In fiscal year 1950, this amounted to $1,348,443. The top red line shows the gross monthly receipts. The green line indicates that portion of the revenue that is derived from commercial telegrams. The blue indicates telephone business and the black indicates other services such as press and leased lines. In fiscal year 1950 there was a slight decrease in civilian traffic due primarily to a reduction in the level of construction as a result of the lateness in the passage of the appropriation acts and a slight business recession in Alaska due to the withdrawal of the Air Force from the Aleutians, Nome, etc. During fiscal 1951 there is a definite upward trend due to the accelerated military construction program. It is anticipated that this trend will continue in fiscal year 1952.

FUNDS FOR BUILDING CONSTRUCTION

This concludes my presentation so far as it relates to the operation of the system and its related technical expansion. I now come to the funds for building construction; i. e., the funds required for the construction of buildings necessary for the housing of technical equipment and personnel of the Alaska communication system. Funds required in fiscal year 1952 amount to $1,400,000. Of this total, $878,600 are required for the construction of operational buildings, utilities, etc., at 13 stations and $521,400 for the construction of 22 family quarters

at six stations. This estimate is based on a continuation of the program of permanent construction required for the Alaska communication system. The prices quoted in these estimates are based on standard figures obtained from the division engineer in Alaska. They are considerably lower than prices previously used. The construction proposed was authorized under Public Law 414.

14. This, gentlemen, concludes my opening statement covering the need for funds for the Alaska communication system. In brief, we are asking for a total of $5,576,000 of which $4,176,000 are for maintenance and operation of the system itself, and $1,400,000 for the public works construction program.

Senator O'MAHONEY. Is there anything else, General Lawton, that you think you ought to describe to us?

General LAWTON. No, sir; I think not. The Alaska communication system is running along at about the same level it did in 1951. Dollarwise, it is a little bit less, because in 1951 we built a pole line up there of four or five million dollars. We do not have another one to build this year, so there is a smaller amount in that particular project.

We have construction up there for $1,400,000 for quarters for noncommissioned officers, and for what we call utility buildings, the communications center for equipment.

Senator O'MAHONEY. Do you have substantially the same equipment for the stock control and the inventory issue that the Quartermaster does? Is your system similar to the Bureau of Ordnance or in some way like it?

General LAWTON. Yes, sir; we do have that control, yes.

Senator O'MAHONEY. And you have a similar system to prevent waste and loss, and that sort of thing?

General LAWTON. Ours is very similar. Our stock control is at Philadelphia, where we maintain the master cards, so that when somebody puts in a requisition, if we do not have it in one depot you can find out if it is in one of the other three depots.

PERSONNEL REQUESTED

We indicate that 1,599 persons are needed for stock control. Our management people say that the line items that are handled during this year of 1951, was 97,000. A line item is a requisition for one item, as "I want four radio sets. I have so many, I am authorized this next four."

Then we have another item on the measure, and that is the line items on requisitions and availability requests.

Then we have the persons administered. This is simply an administrative group that takes care of the over-all administration.

So again, we come up with a figure of needing 1,599 people in our stock-control agency.

Senator O'MAHONEY. How do you prevent duplication of orders by the field or command posts, and the like?

General LAWTON. Philadelphia is the central procurement point, and no one can procure except on instructions from Philadelphia.

Philadelphia asks New York or Chicago to buy items that they know are in their area. There are small items that a depot may buy. There is a limitation, let us say, $500 or $1,000 they might buy locally in an emergency, which we do not have in stock in any of our other depots.

Senator O'MAHONEY. General Lawton, we are very grateful to you, sir.

We will go through these estimates with some care. We might call you back.

General LAWTON. I will be glad to come back any time, Senator.

Senator O'MAHONEY. I am satisfied you will have an answer, if you come.

General LAWTON. I think there are good answers for any figures that are there.

Mr. West is just telling me that out of this $1.1 billion that you gave us last year, I said it was all obligated, but $4 million was not; $4,000,000 was not obligated in 1951, out of $1.1 billion.

Senator O'MAHONEY. Thank you very much, General Lawton.

(Whereupon, at 4:20 p. m., Tuesday, August 7, 1951, the hearing was recessed until 10 a. m., Wednesday, Aug. 8, 1951)